

# ATHLETIC JOURNAL

Vol. XIX, No. 6

February, 1937



West Is West—East Is East

H. C. Carlson, M. D.

Defense Maneuvers

Joe Reiff

Iowa Plays Baseball

H. C. DeKock

*The Team*



*The Coach*



*The Crowd*



*The Janitor*



## **SEAL-O-SAN SERVES THEM ALL**

**W**HEN you apply a Seal-O-San finish, you share its benefits with every one who enters your gym. Team, coach, crowd, janitor—Seal-O-San serves them all.

You protect your team against pulled tendons, torn ligaments, or sprained ankles because the 100% non-slippery Seal-O-San finish permits quick starts and stops without skid or fall.

And because you coach an injury-free squad, you boost yourself along to a successful season. Teamwork improves . . . plays "click" to ring up the points for victory . . . You help your janitor cut maintenance costs because the Seal-O-San finish keeps dirt and rubber burns on top of the floor . . . easily removed by a dustless mop—without costly scrubbing.

You win the support of spectators because, on the beautiful, speedy Seal-O-San floor, you give them their money's worth by displaying the brand of basketball everybody enjoys.

Today, more than 5000 coaches enjoy the advantages offered by Seal-O-San. Why not apply it on your gym floor—now?

**The HUNTINGTON LABORATORIES Inc.**

DENVER

HUNTINGTON, INDIANA

TORONTO



### **SEND FOR THIS FREE BOOK**

This Seal-O-San Coaches Basketball Digest will be treasured by every coach in the country. It contains articles, diagrams, photos, and suggestions on offense, defense, fundamentals, and tournament play—written by America's leading coaches. Its contents are of value to university coach and high school coach

# **SEAL-O-SAN**

SEAL AND FINISH FOR GYMNASIUM FLOORS



# 10 REASONS WHY 2\* OUT OF 3 WEAR BIKE



- 1 *Bike* manufactures a complete line of Supporters—for every sport and every purpose. *Bike* has led the supporter field for years—stands as the standard of comparison.
- 2 There is no skimping of material in the manufacture of *Bike* Supporters—only the finest is used.
- 3 There is no sizing or filler in *Bike* webbing. You are assured of maximum wear—maximum comfort, freedom from chafing.
- 4 All webbing is made in *Bike's* own factory. Your guarantee of uniform high quality.
- 5 Every *Bike* Supporter is scientifically designed for proper fit—assuring uniform pressure and support.
- 6 *Bike* Supporters maintain elasticity. Only the highest quality rubber thread, made to *Bike's* own specifications is used.
- 7 The finer material and careful manufacture mean greater durability—greater washability.
- 8 All pouches on *Bike* Supporters are either shaped or formed, insuring better fit and more comfort.
- 9 *Bike* uses only premium-priced yarn—washes and dries all elastic to eliminate shrinkage—insure cleanliness.
- 10 Coaches, trainers and athletes, for years, have given *Bike* the test of actual use in every sport—and *Bike* wins! 2 out of 3 wear *Bike*!



\*Impartial survey by A. C. Nielsen Co. reveals 2 out of 3 athletes wear *BIKE*.

## BIKE ZINC OXIDE TRAINERS TAPE

● *Bike* Trainers Tape, Zinc Oxide or Waterproof, comes in a variety of convenient widths from 1/4 in. to 12 in. It is ideal for all types of taping and strapping. Adheres instantly in every kind of weather—stays firm without creeping or slipping.

It lasts longer without fraying and causes a minimum of skin irritation. For best results ask for *Bike* Trainers Tape.



SALES AGENTS: A. & C. Co., 100 N. LaSalle St., Chicago, Ill. • McDonald & Co., 100 N. LaSalle St., Chicago, Ill. • J. & C. Co., 100 N. LaSalle St., Chicago, Ill. • J. & C. Co., 100 N. LaSalle St., Chicago, Ill. • J. & C. Co., 100 N. LaSalle St., Chicago, Ill.

**BIKE WEB MANUFACTURING COMPANY**

DANA E. NIELSEN, President • 100 N. LaSalle St., Chicago, Ill.



## CONTENTS

### for February, 1939

#### PAGE

5	West Is West—East Is East.....	H. C. Carlson, M.D.
7	Defense Maneuvers.....	Joe Reiff
10	A Combination Fast-Break and a Set-Play Offense.....	Mike Houser
11	Novelty Defenses for Special Situations.....	Virgil A. Kirste
12	The Ten-Man Team.....	Ralph Lizio
12	Sanitation in Basketball.....	Harold E. Bower
13	Iowa Plays Baseball.....	H. C. DeKock
14	The Power Play in Ice Hockey.....	Westcott E. S. Moulton
16	Keeping Beginners in Wrestling Interested to the End of the Season.....	Richard K. Cole
18	Editorials	
20	Fundamentals of Pyramid Building.....	Hartley D. Price
24	A Coach's Instruction to First Basemen.....	H. S. DeGroat
28	Changes in the National Collegiate Track and Field Rules for 1939.....	K. L. Wilson
29	Layouts for Javelin and Weight Events	
30	Suggestions for Speed Skating.....	J. Fred Gohl
32	The Functioning of an Athletic Officials' Association .....	Carl Nordly, Ph.D.
34	To Eat or Not to Eat Breakfast.....	Jack Matthews
37	Are Sports Worth the Cost?.....	Mark MacIntosh
40	Racing Turns.....	Russell Lindberg

PUBLISHED MONTHLY except July and August by the Athletic Journal Publishing Company, 6858 Glenwood Avenue, Chicago, Illinois, Member Audit Bureau of Circulations. Request for change of address must reach us thirty days before the date of issue with which it is to take effect. Duplicate copies cannot be sent to replace those undelivered through failure to send advance notice.



SUBSCRIPTION PRICES: \$1.50 per year; \$2.00 for two years; \$2.50 for three years; 90 cents for six months; 75 cents for five months; Canada, \$1.75 per year; foreign, \$2.00 per year. Single copies, 25 cents. Copyright, 1939, The Athletic Journal Publishing Company. Entered as second-class matter, August 14, 1925, at the post office at Chicago, Illinois, under the Act of March 3, 1879.



# *A Salute* **TO BASEBALL**

★ As a salute to the 100th Anniversary of Baseball, the Wilson Sporting Goods Co. presents to America's ball players a new Centennial Line of Baseball Gloves and Mitts. Each one is outstanding in design, materials and workmanship, and attractively priced for 1939 only. Here is a chance to celebrate Baseball's Centennial. Whether for yourself or your team, see these new Wilson Centennial Gloves and Mitts. Your nearest Wilson sporting goods dealer should have them. If not, write us. We will tell you where to see them. Wilson Sporting Goods Co., Chicago, New York and other leading cities.

**THE NEW**  
**Wilson**  
**CENTENNIAL**  
**LINE**



**IT'S WILSON TODAY IN SPORTS EQUIPMENT**

# THEY'RE *Pre-Stretched!*



1939  **BASEBALL SHOES**

Spot-Bilt's exclusive pre-stretching process leaves just enough stretch in the leather to give a comfortable, easy fit. Retains softness and pliability.

## **SPOT-BILT BASEBALL SHOES**

New lasts and patterns allow full free action—no binding anywhere—hugs the heel—hugs around the ankle—fits perfectly under the arch.

*Real fit around top*

*Real fit under arch*



**AMERICA'S FINEST ATHLETIC SHOES**

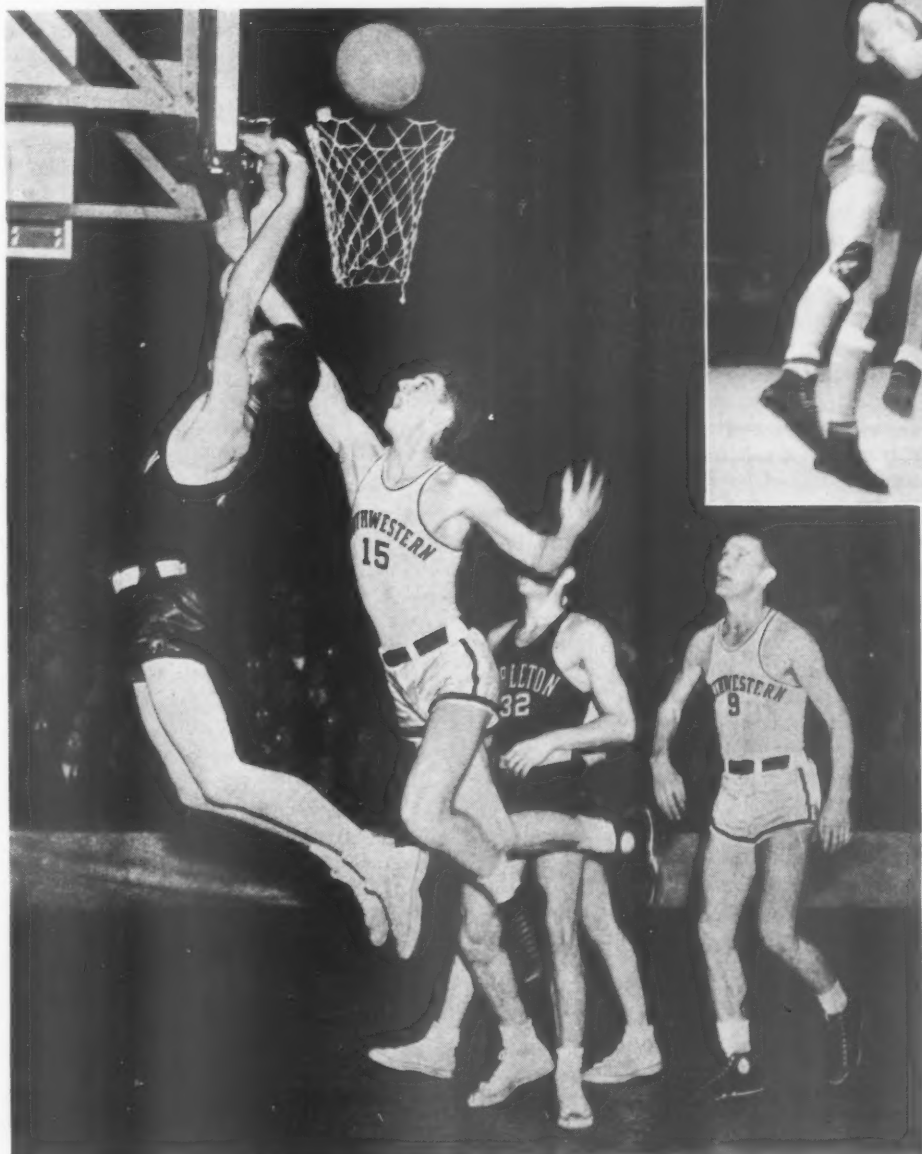
**WITCHELL-SHEILL CO.,**

**1635 AUGUSTA BLVD.,**

**CHICAGO**

# West Is West East Is East

By H. C. Carlson, M.D.



Arme

TIME and intersectional games have not erased nor blended the outstanding factors of college and professional types of basketball play. The West is still the West and the East is still the East. The West still follows, for the most part, a type of ball that had its inception in the colleges. The East, on the other hand, continues to show a reflection of the type of play developed by the professional teams. The officiating favors the offense in the West and the defense in the East. The West is profiting by the smart ball-handling of the East. The East has learned the art of more aggressive action, both defensively and offensively, and of long passes and one-handed shots from the

West. The West has taken more offensives from the East and the East has taken a greater variety of defenses from the West.

The last six years have furnished interesting developments to persons from Pittsburgh, the no-man's land of basketball. In the West, Pittsburgh is considered an Eastern team and in the East, Pittsburgh is considered something of a Western team. Prior to the last few years, the Western teams stopping in Pittsburgh complained bitterly of Eastern interpretations. The Eastern teams returning from the West complained of Western interpretations. It required considerable research to discover that both were honest in the light of vary-

ing interpretations. In the West, a player was bruised in a most frank and straightforward manner, with no quarter given nor asked and the players left the floor arm in arm. In the East only feelings were injured; someone pulled at a player's pants or shirt or kept him off balance by a tug on the arm or by a push in the back; someone was always wailing to the official or falling over with a false cry of simulated pain and the players left the floor suspicious and distrustful of opponents. The Western type personified the wide open spaces, the Eastern type personified the frictional living in compact crowded contacts. In the West, a player *battled* to victory; in the East he *schemed* to victory. But now we approach a better common understanding.

My distrust of the professional type of play began to melt in a game between Penn and Pitt with a college type of official on one side of the floor and Dr. Lou Sugarman, a former professional star, as the official on the opposite side of the floor. The play in question, occurring close by the benches of Penn and Pitt was observed the same by Ralph Morgan, Lon Jourdet, the officials and the writer. One of the Pitt boys, now Dr. William Arture of Pittsburgh, had three personal fouls and did not want to be put out of the game. He saw a Penn man who was closely guarding a Pitt team mate cut toward the position that he himself was occupying. Arture felt that he was entitled to his position but did not want contact and a possible fourth foul. The situation seemed to unfold slowly so that all could observe. Arture apparently feared to move, lest the



Penn man might change his course suddenly, and if he moved, the contact might occur at the second location. He maintained his position, the Penn man failed to alter his course. There was a collision. Arture left the game, and one of the longest basketball dialogues on record started at nine P.M. to last until six A.M. From the Palestra by taxi to the Ritz Carlton, all night and through a cool morning walk to the Broad Street Station, the probe continued. First it was discovered that there were two honest divergent points of view. Next there was a further understanding desired to reconcile opposing viewpoints. Dr. Sugarman said goodnight and started for the door at midnight, and the discussion was renewed. This happened every hour until six A.M. with a clearer understanding developing each hour. To celebrate the establishment of common understanding between the college and the professional game, we went out for breakfast. I have never spent a more edifying and sleepless night as regards basketball. It has since justified itself over and over with a better understanding of the different types of play. Distrust and suspicion on this score are no longer the cause of sleepless nights. Rather, the nights have been spent in trying to point out to others that the pattern of one is honestly different from the pattern of others. As a modest missionary, I must confess that the work of others has gone further to promote a more universal harmony.

Dr. Sugarman stated that, had Arture continued to move directly ahead and there had been a collision, the fault would have been with the defensive man as he should have known enough to take care of himself. The opposing college viewpoint was that Arture, by maintaining his position would cause less physical injury to the opponent in an unexpected collision. The professional viewpoint is that every player should know what to expect from an opponent or should get out of the game before he is forced out. The college viewpoint is that different players have different abilities, varying knowledge and experience, may meet the unexpected, and even though they lose, they may still develop and get concurrent thrills from the game, knowing that they are playing for a limited time and that their social or financial positions are not in danger.

The technique of the professional offense is for the passer and the receiver to approach each other and consummate a short-pass with little chance of interception. Splitting is the term applied to running between a team mate and his opponent. The process is well understood by both the offense and defense and the technique is well standardized. The professional defense man will give enough space for the offensive man to speed through. The inquiring collegian is told of three possibilities of the passer.

1. The passer speeds legitimately between his receiver and the opponent of the latter.—No contact.

2. The passer changes pace and may impede slightly the action of the opponent of the receiver.—Possible contact and a question of responsibility.

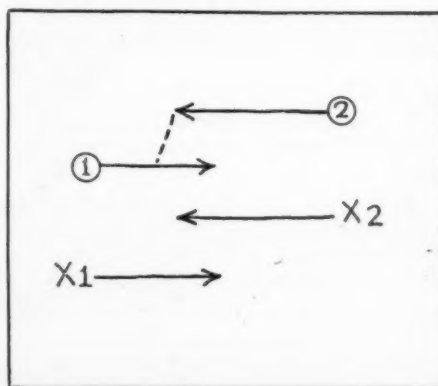
3. The passer stops in the path of the opponent of the receiver, in order to impede progress by contact, and the responsibility is with the passer.

In the professional game it is generally a strict man-for-man defense with the inefficient or the weakling dropping quickly from the scene. There are variations of the three listed possibilities. In the first, the passer may stop directly in front of his receiver to set up a shot or dribble for the latter. In the third possibility, the passer may fake a block to induce a shift and then cut for the basket.

The continuity utilizes usually three or four team mates with the fifth man as a pivot or cutting for the basket. The speed of the interchange offers the extreme of the fast good team and the slower poor teams with marked difference between its extremes of good plays and scoring opportunities offered by the good team in contrast to a continuance of continuity with scoring breaks by the poor team.

The diagram presents the three listed possibilities of O1 going through with regular speed, changing pace and going through, or frankly stopping to impede the progress of X2. The variations that may develop in the first possibility may allow O1 to stay out for continuity or to cut on through to the basket for a score, in either case, through a return pass from O2. The third possibility of O1 stopping to impede the progress of X2 may be to allow O2 to dribble around the screen or for O1 to tarry momentarily and then cut to the basket for a return pass. The third possibility overlaps the second in that O1 may change pace or direction.

The continuity may involve three, four or five men but the salient feature is the speed and proximity of the passer and his



O2, the offensive receiver goes to meet the pass of O1. X2, the defensive opponent of O2 follows across the floor and allows sufficient space for O1 to split and X2 does not create collision with his team mate X1.

receiver with the good fundamental of spread offensive being given by the three other players, one or two of whom may be speeding toward possible reception of the ball or faking this maneuver and cutting toward the basket.

The foregoing floorwork with its necessary concomitant speed represents one of the big factors in the overthrow of the favored Oregon and Southern California teams by the City College of New York and by Long Island University in the Christmas series in New York. These contests stand out as a contrast to the success of Stanford a year previous. The zone defense of Stanford necessitated no shifting of X1 and X2, because the players could wait for the interchanging offensive men. These factors cannot account for different personnel and abilities but they serve to illustrate a conflict of so-called college and professional styles.

The professional types of offense can be mastered by a college team so that it can overcome any man-for-man shifting defense. I think Sam Barry and Southern California will subscribe to this statement. This style of offense, if continued in the same sequence, will run into difficulties against a zone defense and, in this case, the defense wins. This is one of the reasons for Stanford's success where Southern California failed. The professional offense may be altered to cope successfully with the varying types of college defense but it is an even bet, with personnel providing the ultimate winner.

The college offensive allows for less speed and more defensive mistakes. Due to personnel, the college offense must be more deliberate and depend more upon prearranged plays rather than upon the spontaneous plays, set up by the professionals. The college offenses will not run into an abrupt shock and require alterations to meet the zone defense.

Both the professional type and the college type of offenses are subject to variation, if met by aggressive or retreating defenses, whether they be the so-called type of varying zone or varying man-for-man.

There will continue to be college and professional types of play and they will be recognized as such. The West will remain the West and the East will remain the East. The various types of transportation, diets, and sightseeing may be important factors in winning or losing. However, personnel will continue to be the dominant factor. The most important thing is that human activity, the forgetting of self and the consideration of others, are dissolving distrust and suspicion. We are all better for these games, and regardless of the label thereon, we are getting not only a more universal understanding, of techniques and topographies, but also that which is more important, a healthier, happier, estimate of other human beings with the same desires that we, ourselves, have.

# Defense Maneuvers

By Joe Reiff

**B**ASKETBALL was a slow game that was over-balanced on the defense side. Today it is a fast game lopsided on the offense side. It once resembled a game of chess where the players were pawns, moved with slow deliberation by the master mind of the coach. To keep possession of the ball was the best defense.

Today, basketball is a contest of action and thrills because the war cry has changed to, "A good offense is the best defense."

Since the country has become offense-minded, the principle of team defense then assumes a greater importance than ever before because there are necessarily more occasions to employ good defensive tactics in the faster game. The game calls for defensive maneuvers as well as keeping possession of the ball.

Moreover, these defensive principles or techniques can be stressed without reducing the speed of the game or lessening the action of the game. A team that can switch quickly and with little effort, a player who can guard two or more opponents running down the floor at break-neck speed, or two players who can cover three or more opponents on a fast-break, can put on a show just as thrilling to the fans as any number of spectacular shots splitting the nets with monotonous regularity.

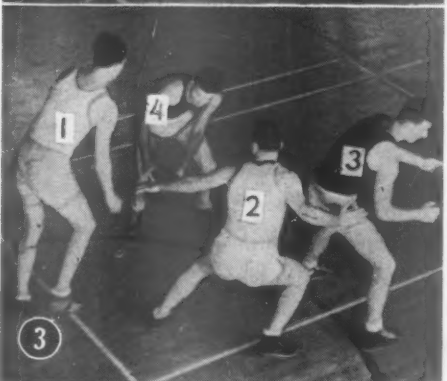
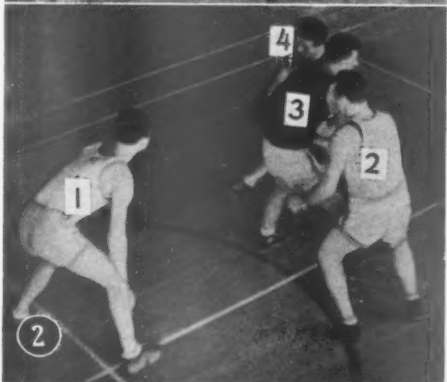
## Switching

Switching, of course, refers to the act of a guard changing from one opponent, whom he is covering, to another opponent who is in a more favorable position to score.

The interpretation of the rules with re-

gard to screening plays when switching is necessary to cope with the situation, have been changed from year to year. The reasons for the changes may be attributed partly to the laxity of officials, but are due, mainly to the inability of the players to react properly to the situation.

Before the ball is passed to the pivot man, the guard should play him closely, should watch for possible interceptions and should make it difficult for the opponents to pass the ball to the pivot man.



## THE CORRECT WAY OF SWITCHING

Illustration 1—Guard 1 backs up a step to cover 3 and 4 at the same time.

Illustration 2—Guard 2, seeing he cannot cover 4, because 3 is in the way, runs to the inside of 3.

Illustration 3—After the ball is passed; 1 switches to cover 4 and 2 switches to cover 3.

Illustration 4—Guard 1 is now covering 4 instead of 3 and guard 2 is covering 3 instead of 4.

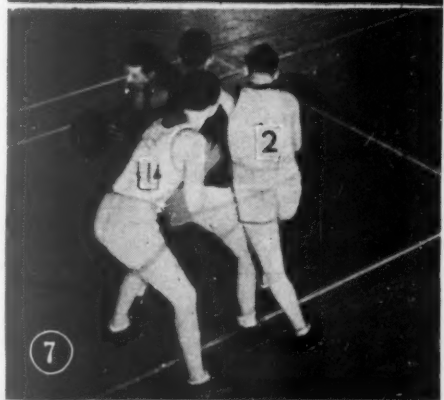
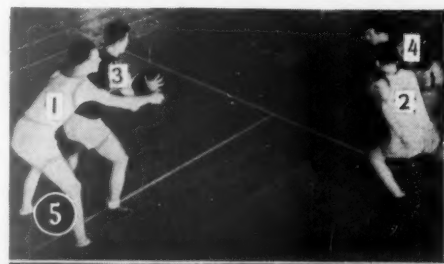
## THE INCORRECT WAY OF SWITCHING

Illustration 5—Here 1 is covering 3 and 2 is covering 4.

Illustration 6—Guard 1 is playing too close to 3; he should be a step and a half farther back.

Illustration 7—Guard 2 runs into 3 instead of to the inside of 3.

Illustration 8—One fails to switch, allowing 4 to dribble to the basket. If 1 catches 4, 3 can pivot and run to the basket for a return pass.





But when the man receives the ball, the guard should retreat one and a half steps so that he can cover the pivot man and also any other opponent, cutting by for a pass. There is no advantage in playing the pivot man closely after he receives the ball and, furthermore, this is conducive to fouling. There is an advantage in playing him loosely because, then, the guard is in a better position to switch to another opponent. Of course, this leaves the pivot man free to make a one-handed shot from the free throw lane. This, however, is not a serious threat because of the poor percentage on shots of this kind.

The guard, covering the man who is breaking close to the pivot man for a pass, should run to the inside of the pivot man and guard him. He should never follow his opponent around the pivot man or bump into the pivot man.

### Two Against Three

A large majority of teams use what is called the standard method of two against three. Under this arrangement, the men

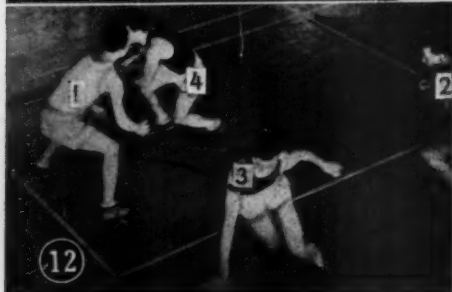
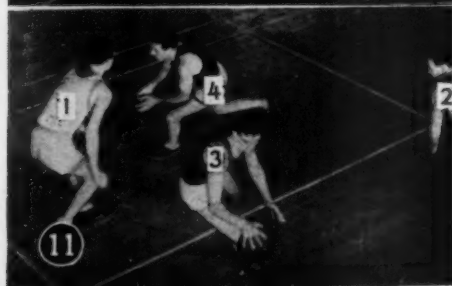
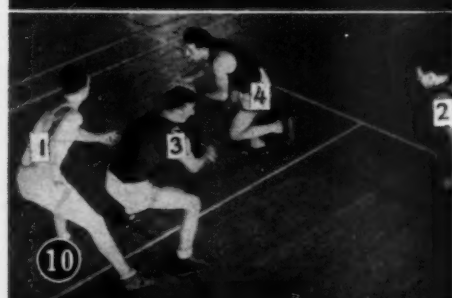
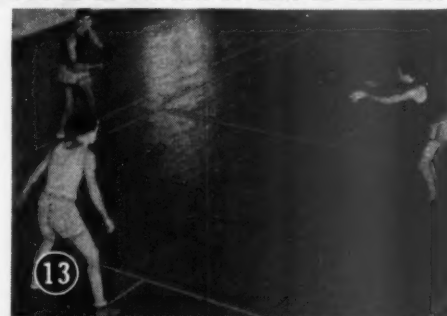
retreat to positions shown in Diagram 1. When the center man, near the free throw area has the ball, guards 1 and 2 feint as though to charge him in order to bother him. But 1 or 2 cannot leave their positions because that would allow the opponent on the side to run under the basket for a fast pass and easy shot. Hence, many times the center man is allowed to take the best shot on the floor.

This weakness has been successfully eliminated in a comparatively new method which, gaining in popularity, has been tried and proved to be good. The only drawback is that it is more difficult to teach.

Assuming once again that the center man has the ball, as in Diagram 3, note the difference in the way the guards line up. Two is unusually the tall back guard; 1 is usually the small, faster guard. Now the center man does not have the same opportunity to shoot that he had under the first arrangement.

Assume that he passes to the man on his left, as in Diagram 3. Player 2 shifts to cover the man who has the ball and 1

retreats in the opposite direction toward the basket as shown. One watches the ball as he retreats so that he can inter-



### AN INCORRECT WAY OF SWITCHING

Illustration 9—Guard 1 is playing too close to 3.

Illustration 10—Guard 1 has switched too soon, leaving 3 (Illustration 11) free to pivot and dribble to the basket (Illustration 12). Guard 1 must wait until 3 passes before making a switch.

### CORRECT ONE-AGAINST-TWO PLAY

Illustration 13—The guard should stay between the men. He should retreat and feint as if to charge the man with the ball.

Illustration 14—The guard under the basket shifts laterally to the left to stop the dribble.

Illustration 15—The left arm should be raised and the left leg extended, when blocking a shot off the left side. The player's back should be kept parallel to the backboard. If the ball is passed to a team mate on the guard's right, he should shift laterally to the right.

Illustration 16—The player's back is parallel to the board and his right arm and leg are extended.

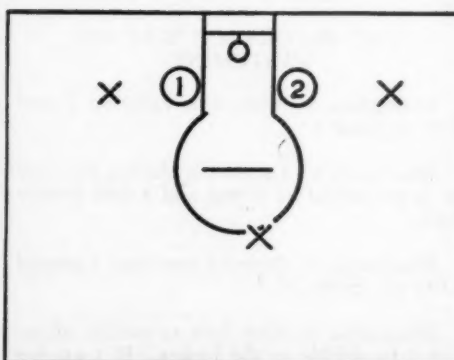


Diagram 1. Standard way of playing two against three.

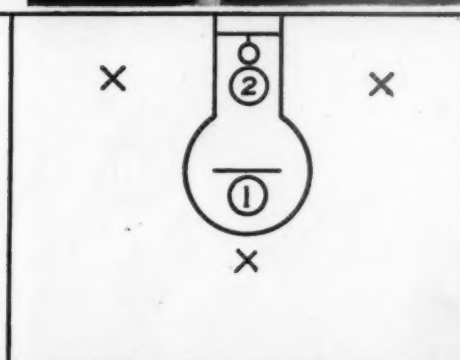


Diagram 2. A different line-up.



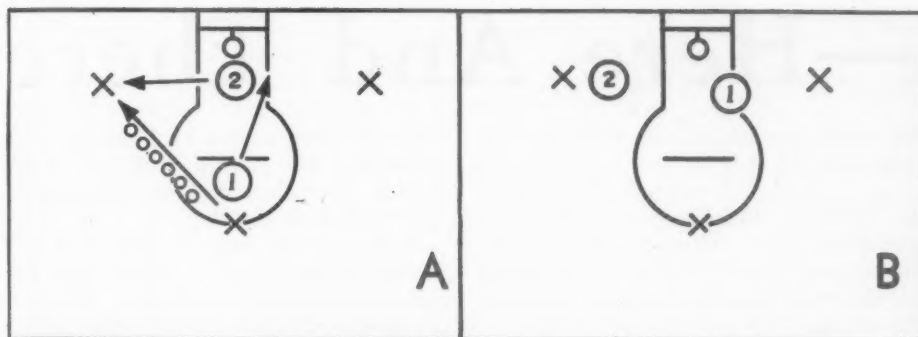


Diagram 3. The guards shift in the direction arrows point in A. Players' position after shifting are shown in B.



### THE INCORRECT WAY TO PLAY ONE AGAINST TWO

Illustration 18 shows the guard turning his back to the man without the ball.

Illustration 19—The right arm and leg are extended instead of the left.

Illustration 20—When the man hook-passes, the guard does not have enough time to get back.

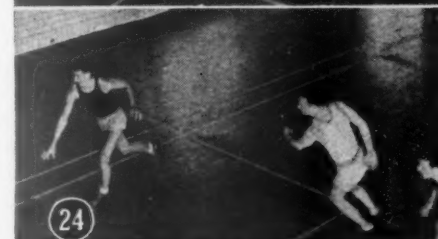
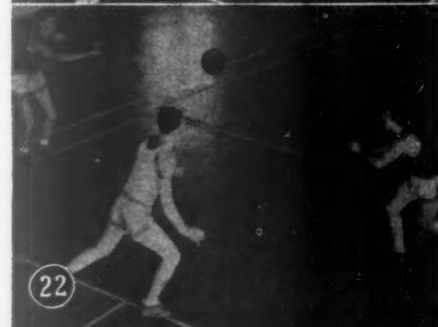
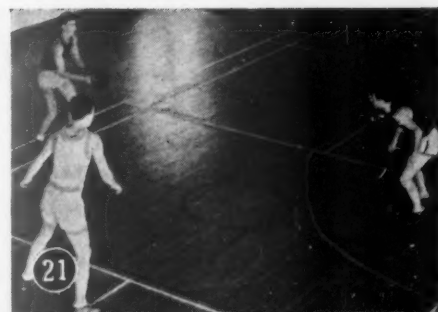
Illustrations 21-24—In guarding two men, the player is violating the primary principle of retreating, feinting and jockeying between them; he is charging (Illustration 23) toward the man with the ball.

cept any cross-court pass. Note that the man with the ball cannot get an easy shot nor can he make a cross-court pass without the danger of an interception. If he passes back to the center man, 1 advances to cover him and 2 shifts to a position under the basket. Guard 1 always covers the center man when he has the ball. Guard 2 always plays under the basket when the center man has the ball. When a pass is made to either side, guard 1 faces the ball as he retreats in the opposite direction and watches for a cross-court pass. Guard 2 always covers the side man who has the ball, being careful to come out no more than 10 or 12 feet from the basket. If neither side man has the ball, guard 2 plays under the basket, so that he can shift to either side when the ball is being passed.

### One Against Two

The problem of a guard who must cover two men charging down upon him is mainly one of forcing the men to proceed at a slower pace. The best way to do this is for him to get the dribbler to stop the dribble.

The guard should stay between the men and retreat by taking short steps backward. His attention should be concentrated on the dribbler but he must remain in a position to drop back to the basket at all times. Many times the dribbler will stop if the guard feints as though he were going to charge the dribbler or suck in toward him. When the dribbler stops,



the guard has gained a few precious seconds for his team mates to come back to help him. Many times it is advisable for the guard to slap his foot on the floor as he feints his charge, because many dribblers concentrate so much on the ball that they do not see these feints.

If these movements do not give the players sufficient time to get back on defense, then the guard should retreat to a spot underneath the basket. If the dribbler or man with the ball is on the left, the guard should shift laterally to the left, keeping his back parallel to the backboard, and extend his left foot and left arm to block the shot, as shown in Illustrations 13, 14, 15 and 16.

If this man, instead of shooting, hook-passes to the man on the right, the guard should shift laterally to the right, keeping his back parallel to the board and extending his right foot and right arm to block the shot.

The worst mistake, and a very common mistake, is shown in Illustrations 18 and (Continued on page 43)

# Basketball—Here And There

## A Combination Fast-Break and a Set-Play Offense

By Mike Houser

Andrew Jackson Senior High School,  
Jacksonville, Fla.

**T**HE best way for a coach to keep an opposing team guessing, if he has boys that can play both the fast-break and the slow set-type of basketball, is to use a combination of the two.

Fundamentally, basketball is a game of passing the ball and shooting baskets, regardless of the type of offense or defense employed by a team.

If we can get the jump on our opponents, or if we intercept the ball, we fast-break, otherwise we resort to our set plays. The plays help the boys get started a certain way and aid all the players in know-

ing what they should do with the ball when they get it.

In Diagram 1, 5 passes to 4 who gives the ball to 3. Three passes to 5 who shoots. Five, 3 and 2 follow in. The guard on the opposite side of center breaks in for a pass.

In Diagram 2, 5 passes to 4 who gives the ball to 3. Three passes to 5 who shoots. Five, 3 and 2 follow up the play.

In Diagram 3, 2 shifts to the opposite side and the play is worked as in that shown in Diagram 1. Four passes to 5 who fakes to 4 and passes to 3. Three passes to 1 who passes to 5. Two shifts when 5 fakes to 4.

In the center play, shown in Diagram 4, 3 stands outside the circle. Five passes to 3 who passes, dribbles in or shoots. Four and 5 stay back. One and 2 break for the basket, when 3 gets the ball. One, 2 and 3 follow up.

Diagram 5 shows the guards breaking in and the forwards coming out to screen. Four passes to 3. Four and 5 break in. Three passes to 4 or to 5, shoots or dribbles in. Three, 4 and 5 follow up. One and 2 come out and screen. Three steps out of the free throw circle.

In the guard play, shown in Diagram 6, 5 goes in, fakes for a pass, spins and goes in under the basket. Four passes to 5. One and 2 follow up after 5 breaks in. Three comes out.

In the play shown in Diagram 7, 4 passes to 1 who gives the ball to 4. Four dribbles in or passes to 3 or to 2. Four, 3 and 2 follow up the play.

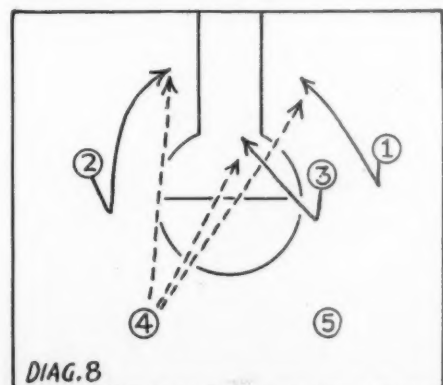
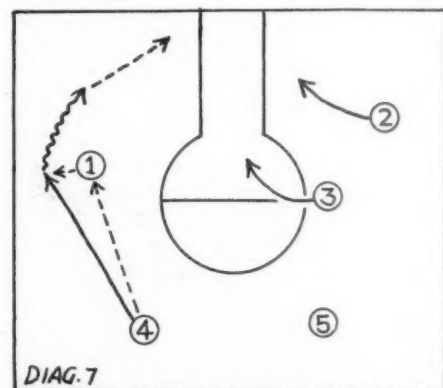
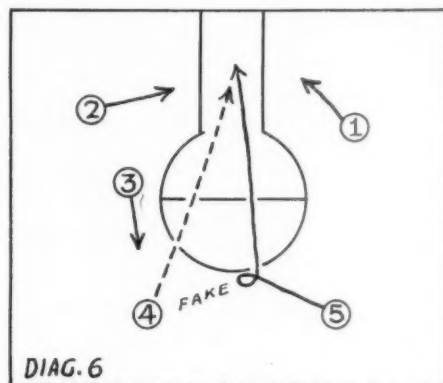
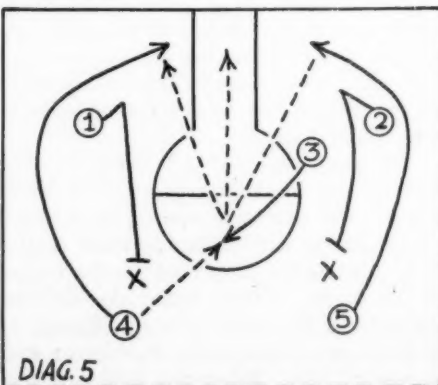
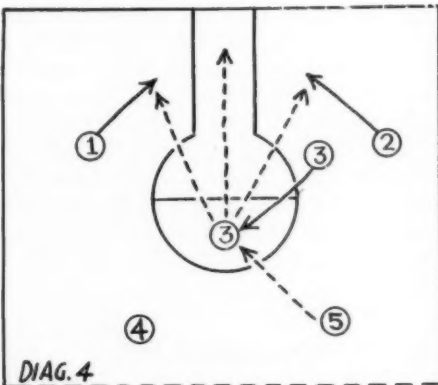
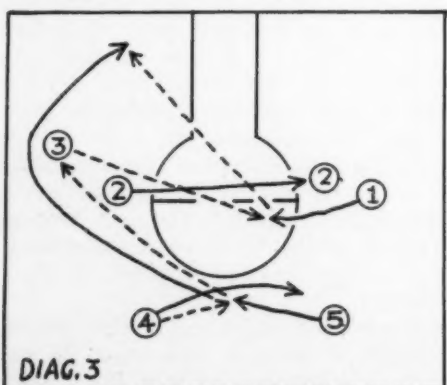
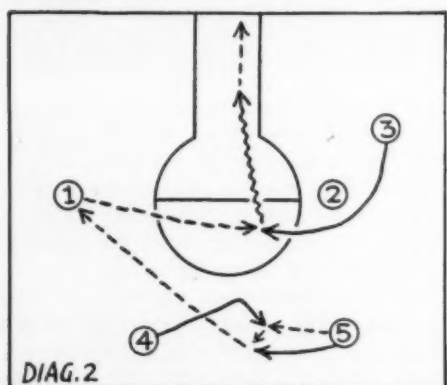
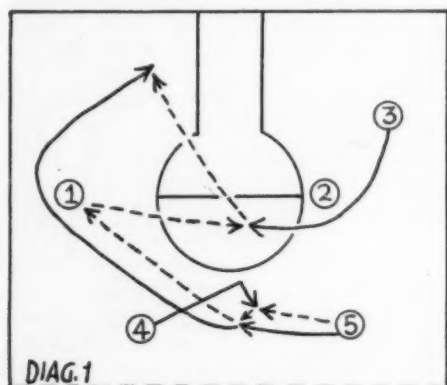
In the play shown in Diagram 8, 4 or 5 passes the ball. One, 2 and 3 fake out and break in under the basket. The ball is passed to whichever man is open and the other two follow up the play.

## Novelty Defenses for Special Situations

By Virgil A. Kirste

High School, Ryegate, Montana

**C**OACHES in Montana, where the game has previously been played more offensively than defensively, are now becoming defense conscious with the result that many weird defenses are



gaining prominence. I personally still believe in the man-for-man, which I develop early in the season, and in the shifting zone, 2-1-2 variety, which I develop later. However, some of the novelty defenses have their good points and make excellent late season diversion for players who, beginning to grow tired, are in danger of going stale. I would like to give you two that I consider the best of these trick defenses.

The first of these defenses, shown in Diagram 1, is known variously as a four-man zone, a T defense, or a cross defense. At first glance, it appears to be fundamentally unsound. It is. It allows the offensive guards an uncontested shot from one of the best shooting spots on the floor. This may be more clearly understood from Diagram 2 which shows how X2 and X3 must drop back as the ball comes in close to the basket to prevent the other team from getting lay-up shots.

The joker, however, appears after the shot has been taken. Let us go back and follow a play through the diagrams and see just what really does happen.

Our opponents have reasonably good forwards and perhaps a good center but their guards are weak, particularly on shots. This is our reason for using this defense. We would not dare use it if our opposing guards were dead shots. Our opponents have secured the ball under our basket. X2, X3, X4 and X5 immediately drop back to the positions indicated in Diagram 1. X1, who is our best forward, hawks the ball, that is, he chases it all over the floor just as he used to do, when he was an inexperienced freshman. The play looks as if orders were mixed up

somewhere and it appears that X1 is trying to cover up for the other guards who are not doing their duty. At any rate, we hope that it looks that way.

As the ball comes past the center of the floor, X2 and X3 drop back along the free throw lines to form a square. From now on, X2, X3, X4 and X5 each have a definite territory to guard, as shown in Diagram 2, but the territory is small and easily guarded; the box remains reasonably intact and the area inside is small enough to discourage the opponents from going inside. At this point our opposing guards, who see that their forwards are being effectively covered under the basket, notice that the spots in front of X2 and X3 are wide open and that only one man, X1 is guarding them so they go in for a shot. They lose X1 who wants to be lost at this point and they are only slightly annoyed by either X2 or X3, one of whom comes out to spoil the shooter's aim as much as possible, and to get a running start for our basket. That is the place to which X2 or X3 is going *immediately* and for which X1 has already started, since he knows that, with X2, X3 and X4 in so close to the basket, they are forming a perfect screen and that X5 will invariably take the rebound.

From there on the play is simplicity itself. X2 or X3, who went out to meet the shooter cuts diagonally across the floor (Diagram 3). X3 breaks toward the side line and then for the basket; X1 is already racing for the basket. The play is X5 to X2 to X1, or, if you like long passes, X5 direct to X1.

X2 breaks directly for the basket after he passes and X1, therefore, should he have any difficulty making a shot, has both X2 and X3 coming in fast to help him out.

What if our opponents make the basket when they shoot. This is all right. X5 is right under the net. He takes the ball as it comes through, steps back one step out of bounds and hooks it down the floor in the same play. It is reasonably safe to say that we will get a basket either way, while our opponents have gambled on theirs. Perhaps this formation should be classed as an offensive maneuver rather than as a defensive one, as its success depends upon our making a basket.

If you want to take a little more time in developing this defense, a slight shift may be used, but care must be taken not to break up the formation so much that you spoil the screening situation. X5 must recover the ball every time and without delay.

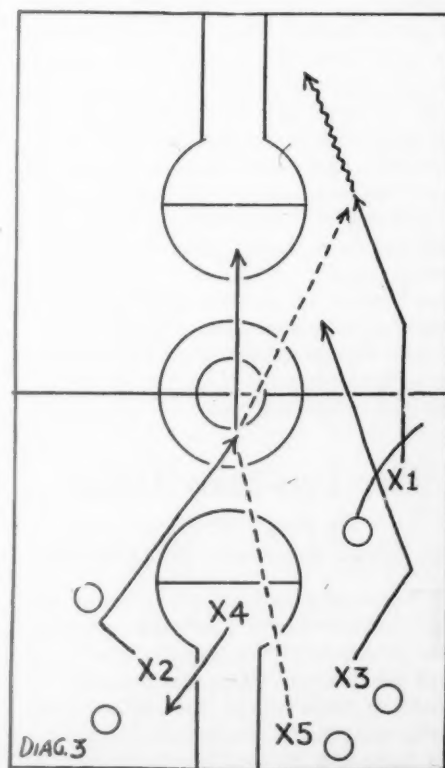
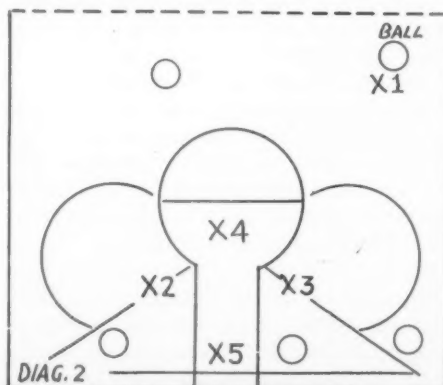
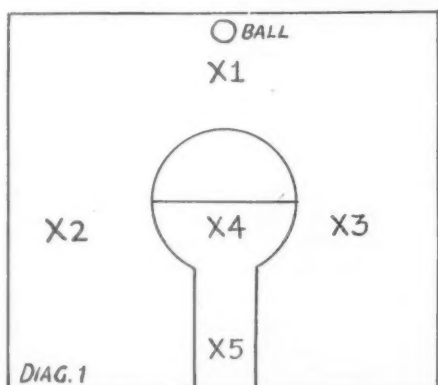
The second trick defense, that I shall explain, is to be used in a situation directly opposite to that of the first just described. Some coaches have the habit of putting their best scoring threats at guard, particularly if they are fast and good floorworkers, the kind of men that it is almost impossible for one ordinary man to guard.

In this situation the plays will usually be built around these fast moving guards with the forwards feeding the ball rather than taking any great number of shots.

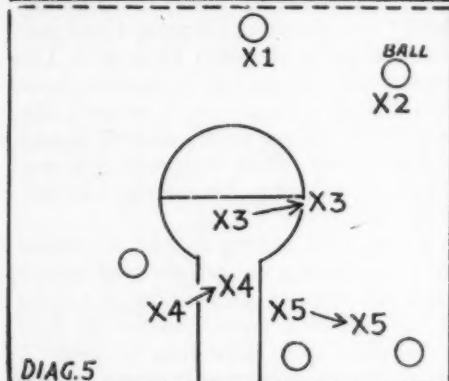
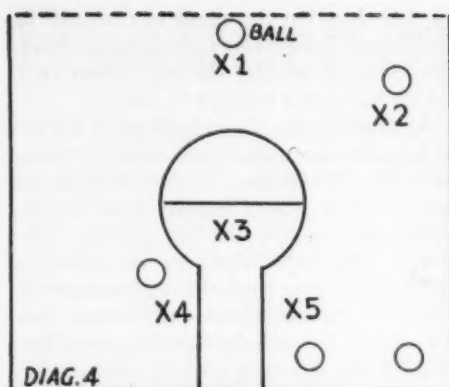
Against this kind of an offense, a combination defense, sometimes called a three-man zone, is effective. In this defense the two forwards play a regular man-for-man assignment against the two guards. The guards and center also play man-for-man all over the floor until the opponents have advanced the ball across the center line. As soon as the ball crosses the center line X3, X4 and X5 drop back to positions directly in front of the basket and to either side of it as shown in Diagram 4 and shift with the ball as shown in Diagram 5. This has the effect of putting two guards on one man and as soon as our opponent's fast man shakes off one guard, he finds himself facing another, which fact, even if it does not completely stop his scoring, will definitely slow it up.

A very good fast-break may be worked from this defense too, but the play usually takes the form of a spot play, a passing of the ball to a given spot on the floor rather than to a given man or men. A simple play of this type is shown in Diagram 6. Circles 1, 1A, 2, 3, and 3A are meant to indicate spots to which the ball is to be passed and not players, for in man-to-man defense no one can predict where any player will be at the time that he secures the ball. It is, however, a reasonably safe guess that the guards and the center will at least be somewhere under the basket attempting to recover.

Spots 1 and 1A are assigned to the guards, spot 2 to the center, while spots 3 and 3A must be covered by the forwards who must pass through X3 or X3A on







their way. All players break for their nearest assigned spot as soon as the ball is recovered and continue on in the direction indicated by the arrows. Passes are made blindly. The man who recovers the ball passes immediately toward 1 or 1A; whoever receives the pass here immediately passes to the center at 2; and he, in turn, immediately passes toward spot 3 or 3A. No one is to hold or dribble the ball and passes are to be made toward the spots, even if the spot is occupied by an opponent; in this case the man breaking for that spot must break in front and take the pass there. Hook and bounce passes are used, for the path to the spot is frequently blocked by an opposing player. The players must develop that sense which tells them where their team mates are, or at least on which side of the floor they are, for it is not an infrequent occurrence that both guards or both forwards break for the same spot.

As I indicated at the beginning of this article, I do not consider either of these defenses fundamentally sound and I shudder to think what would happen to a team that had no other defense.

## The Ten-Man Team

By Ralph A. Lizio

High School, Portsmouth, New Hampshire

THE ten-man team refers, of course, to two teams alternately playing one game. The so-called first team plays the first and third quarters and the remaining team plays the second and fourth quarters. The future championship team can no longer rely upon five

well-developed players and their substitutes. The tournament at Providence, Rhode Island, last spring illustrated my contention. Manchester, Connecticut, defeated all her opponents because of this method of playing. She chose to wear her opposition down rather than to depend upon the uncertainties of superior speed or strategy. The New Hampshire champions, whom she defeated in the first round of the tournament, were ahead at the end of the third quarter by eight points, when her fresh team came on and easily took the lead.

We must bear in mind, however, that *funds* and *men* are vital factors in the development of the ten-man team. A smaller community with limited men and funds will no longer be able to compete with a metropolis. Maine, New Hampshire, and Vermont may be obliged to organize a tournament of their own for they are largely composed of small rural communities with no great centers of population.

The ten-man team is the logical result of the rule changes of the past decade. The rules have consistently tended to speed up the game until, today, it is probably the fastest game afoot. The elimination of the center jump after a basket, the ten-second zoning rule, and the new substitution rule have been largely responsible for the ten-man team. It is a startling admission that five young men can no longer most efficiently play this game of basketball to its exciting end—that they must rely upon another five young men to see them through. It is more than an admission; it is a challenge to coaches everywhere.

## Sanitation in Basketball

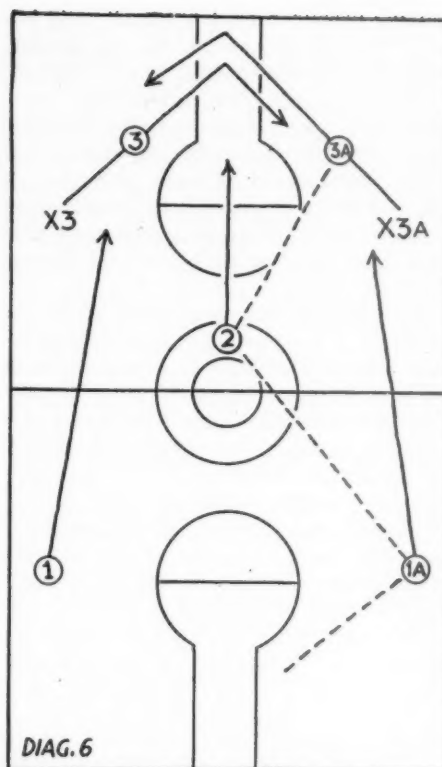
By Harold E. Bower

High School, Washburn, Illinois

WHILE much of our attention is focused upon the winning of basketball games, all too little attention has been given the part of sanitation, a fundamental principle, underlying the playing of these games.

The success or failure of athletic teams is due in many cases, to causes and conditions, not noticed by the average spectator. Most coaches, however, are interested, not only in winning games, but also in the development of better health programs. They are aware of the need of sanitary playing conditions.

All of us are familiar with the general procedure in our basketball games. The team is provided with a single towel. When time-outs are taken, it is thrown across the floor by a none too careful manager. This procedure provides ample opportunity for the collection of dust, dirt, and germs. This towel, as it is used in turn by each player collects and redistributes germs to the individual members of the teams. It is then thrown back across



the floor to the manager who saves it for future use.

A single water bottle is provided from which a player takes a swallow and passes it on to his team mates, again providing an opportunity for the germs to do their deadly work.

As time-outs are taken, the players may be seen sprawling about on the floor giving every opportunity for their bodies and suits to pick up an additional supply of germs.

Athletic equipment itself may in many instances contribute much to the growth and development of disease among the members of the squad.

A system which provides for at least a weekly laundry of supporters, pants, shirts, socks, and shoe strings will do a great deal to reduce disease among the squad members. Cold showers should always follow the warm showers, thus closing the pores of the skin and making the players less susceptible to coughs and colds which are so easily spread among members of the team.

Showers should be equipped with anti-septic solutions for foot bathing. Showers and locker rooms themselves should also be subjected to periodic cleansing.

Individual face towels and water bottles should be provided for each member of the team. In order to assure each player his individual towel and water bottle during the period of the game, a case may be provided which is divided into sections. Each section may bear the player's number, enabling him to find his equipment quickly and easily return it to its proper place.

In order to prevent the picking up of

(Continued on page 43)

# IOWA PLAYS BASEBALL

By H. C. De Kock

Superintendent of Schools, Manson

state tournament consist of seven innings.

SINCE the turn of the century, Iowa has been known nationally as a great track state. The college State Track and Field meet, for so many years an outstanding event, and the Drake Relays have been the contributing factors of this nation-wide track and field reputation.

Iowa has now come into prominence in the athletic world because of the great interest in baseball in the high schools. There are approximately 1,000 schools in the state that have high school departments; 898 of these schools are members of the State High School Athletic Association. These member schools, like the schools of all the other states, support basketball teams.

An exceptionally large percentage of them, however, support baseball teams, and the State Baseball Tournament of Iowa has become one of the outstanding events of the country.

## The County Representatives

Each county desiring to be represented in the State Baseball Tournament must select a representative. The county determines its own method of selecting this representative team. This may be done by selecting the most representative team based on the results of games played up to that date, or it may be done by holding a county tournament or by any other plan that the county organization may desire to use.

This selection must be made at the latest by May first, or a date near that time, the definite day set each year by the Executive Secretary of the Iowa High School Athletic Association. The Secretary must be notified at once if the county is to be represented.

## District Tournaments

There are eight district tournaments. Each of the ninety-nine counties is invited to send a representative team to the district tournament. Teams are limited to fifteen players and not more than this number may be used in any game to determine the championship of the state series. Pairings are made by the Executive Secretary. Each team looks after its own entertainment and expense. Teams provide their own meals at the tournaments. The local expense of tickets, balls and advertising is provided by the school holding the district tournament. A diamond, properly marked, must be provided by the local school. The principal or superintendent of the local school is responsible for the attitude of the crowd toward the official and players at all times. All games consist of seven innings. Eligibility lists

MUCH credit for the increased interest in baseball in Iowa should go to H. C. De Kock, Superintendent of Schools at Manson, is the personal opinion of the editor of this publication. Mr. De Kock, because of his belief that baseball is especially adapted as a spring sport to the growing boy, who has been subjected to the rigid discipline of football and the blistering pace of basketball, had an idea that the state baseball tournament could be made a success. His invitation to the state board of control of athletics to hold the tournament in Manson in 1933, was accepted.

So successfully was the tournament managed that each year since, the tournament has been held at Manson. The enthusiastic reports of the participating schools and of the press of Iowa about the tournament have done much to increase interest in baseball. The success of Mr. De Kock and the citizens of Manson should be an incentive to other school men and other cities.



H. C. De Kock

must be sent three days before the tournament to the superintendent of the center school to which a team is assigned by Mr. George A. Brown, Executive Secretary of the Iowa High School Athletic Association. The local school retains 50% of the receipts and 50% is sent to the Iowa High School Athletic Association to provide awards and officials.

The eight winning teams in the district tournaments are eligible to participate in the state tournament. All games in the

## The State Tournament

Since 1933, the state tournament has been held at Manson. The tournament is run off in two and a half days. Two games are played on Thursday afternoon and two on Friday afternoon. The two semifinals are played Saturday morning and the final game is played Saturday afternoon.

Every Iowa high school is invited to nominate one of their girls for the Queen of the Iowa State Baseball Tournament. From these contestants a queen is selected according to an established rating chart. She and her six attendants, chosen from Manson High School, are honored guests at the "Play Ball" Banquet and other social events arranged through the week-end by the hospitable citizens of Manson.

I have been asked for my opinion as to the reason for the increased interest in baseball in Iowa.

It is rather difficult to say when high school baseball received its first impetus in Iowa. We do know that there has been a marked and continuous increase in the number of schools playing baseball since 1932. The increase has been especially noticeable among the schools with larger enrollment. In 1933 no high school was represented in the state finals with an enrollment in excess of 250; since 1933 schools like North High, Des Moines, Burlington High School, Davenport High School and Mason City High School have frequently been represented.

As to the responsibility for the increased interest in Iowa High School baseball, no one factor can be singled out and given the credit. One of the greatest contributing factors has been the organization of elimination district tournaments with teams representing their respective counties, by George A. Brown, Executive Secretary of the Iowa High School Athletic Association.

American Legion Posts in Iowa have contributed their share by promoting baseball during the summer months.

The co-operative efforts of the people of Manson, in jointly sharing the responsibility of making the State Final High School Baseball Tournament a real event in the life of every boy who participates, and the enthusiasm these efforts have generated in the state tournament, we believe have contributed materially to increasing high school baseball interest in Iowa. Manson has received considerable recognition for her efforts in this respect and among sports writers and speakers is frequently referred to as the "Baseball Capital of Iowa," in spite of the fact that the total population is less than 1500.



# The Power Play in Ice Hockey

By Westcott E. S. Moulton  
Pomfret School, Pomfret, Connecticut

**T**HE power play is the most formidable play used in ice hockey. It is also known as the five-man attack and received its impetus with the origin of the zone-line rule which facilitates forward passing in each zone. Today, this play is increasing in popularity throughout the hockey world. First instituted by the professional teams from Canada, it has been quickly adopted by amateur teams in this country. In its beginning it was used only toward the end of a game, when a team was behind and was making a desperate attempt to tie the score or win the game. In those days it was a play lacking in organization, crudely carried out. With its development in the professional ranks, it became a smoothly executed and high-scoring play which delighted spectators everywhere.



Illustration 1



Illustration 2



Illustration 3

It is now used as a regular attacking play but is especially valuable on rough or soft ice, where passing and carrying are rendered difficult and at a time when the opponents are short-handed owing to penalties.

As its title implies, the play is an attempt to put all the pressure possible on the defending team by sending up the ice all the attacking players with the only exception of the goalie. As will be later explained, even the goal tender, or rather his substitute, may get into the attack.

Ordinarily, the center starts the play when he circles his goal with the puck and then swings up the ice with it. At this point there are several alternatives which he can choose. The object is to get the puck and the attack into the opponent's defensive zone as quickly as possible. The center may attempt to stick-handle the puck through the opposing forward line and thus advance the rubber into attacking territory. Or, he may pass the puck ahead in the neutral zone to one of his wings who will then carry it in. Perhaps the safest method, however, is for the center to lift the puck into the air toward the corner of the attacking zone, just before he reaches the opposing forward line. In doing this, he should be sure to angle it away from the defense, so that the players cannot stop it with their sticks,

Illustration 1—The right wing is shown passing the puck to the center who will shoot for the goal. This was the first pass successfully tried and executed in the early days of the power play.

Illustration 2—This picture illustrates better than the preceding picture the individual positions in the power play. The right wing is in the right corner. The center is in front of the goal. The left wing is to the left of the goal, ready to converge on the goalie when the shot is made. The defense is carefully spread for passes back.

Illustration 3—The right wing passes back to the right defense who can shoot at the goal or pass to any team mate. Note that the lane is open to the goal for shooting.

Illustration 4 shows an opponent chasing after the puck, as it is passed around the horn.

Illustration 5—The right defense has chosen to pass to his left defense who can shoot at the open cage or pass again to another team mate.

Illustration 6—The opponent is still chasing the puck and is almost completely out of the play. Rapid passing around the horn, back and forth, will draw opponents out of scoring territory and thus open up lanes for scoring.

hands, or bodies. This is the quickest method of getting the puck into the desired sector with a minimum chance of failure. As the center is making his shot, he should remember to keep the puck well away from the opposing goal tender so that the latter cannot get possession of it and pass it to one of his team mates, thus breaking up the attack. If the center shoots the puck at the right-hand corner of the attacking zone, the right wing should quickly pick up speed to beat the opposing defense in to the puck. After the center makes this shot at the rear boards, he continues down the ice stopping about fifteen feet out in front of the cage. In this position he should move quickly about to keep the defense from covering him too closely and to keep himself clear for the pass that he might re-



Illustration 4



Illustration 5



Illustration 6





Illustration 7



Illustration 8



Illustration 9

ceive, if the opportune moment arrives. In the meantime, the left wing has quickly skated in to the rear of the goal, just a few feet to the left of it. The defense players have followed the center into the attacking zone and have taken up their positions as follows. The right defense stops just inside the defensive blue line, about six feet from the right-side boards. The left defense enters the attacking zone, stopping just inside the blue line, about in the middle of the ice on a direct line with the goal. These are the positions ordinarily assumed by the attacking players as the puck is sent into one of the corners (Illustration 1).

When the right wing has beaten the opposing defense in to the puck, he may do one of three things with it, according to the circumstances. First of all, he may pass it against the backboards, so that it reaches the left wing to the left of the cage. Secondly, he may pass it back to

Illustration 7—The right wing has passed the puck around behind the goal to the left wing. The left wing is seen flipping the puck out to the center who is in an excellent position to score. The right wing should be careful not to get into the goalie's crease before the puck or the goal will be nullified.

Illustration 8—The right wing is about to pass the puck to the center. This illustration shows clearly the opening in the goal at which the center has to shoot.

Illustration 9—The center is about to shoot the puck at the cage. This illustration shows perfectly the wings converging on the goal to poke in the rebound, in case the shot does not score.

Illustration 10—The right wing passing to the center. This is a poor play as the goalie is coming out to intercept the pass. The center should always be far enough away from the goal so that the goal guard cannot intercept or deflect the pass.

Illustration 11—The right defense has shot the puck. The center and left wings are converging on the goal for the rebound. The right wing is out of the play. He, too, should have come in toward the goal as the shot is made.

Illustration 12—The left defense is about to shoot the puck. The center and wings are ready to follow in on the shot. In this case, the right wing is in about the correct position so that he can get the puck, if it is deflected into the right corner by the goalie.

his right defense near the blue line. Or, he may pass it quickly in to the center in front of the goal (Illustrations 1 and 2). In the early days, this latter maneuver was usually the one first tried, but it was often found that the center was being covered by the free defense man and, thus, the scoring chance was nullified. The objective of the power play today is to remove the defensive players from in front of the goal by passing the puck back and forth along the side and end boards, until the opponents are drawn out of the scoring region (See Illustrations 8, 9 and 10). With that accomplished a quick pass-out to the center at the right moment often will result in a score. The best thing for the right wing to do is to pass the puck behind the goal to his left wing, who instantly passes it back to him again. Then, the wing passes the puck back to his right defense. Usually, by this time, the opponents are spread along the boards desperately trying to get possession of the puck (See Illustrations 3 and 4). From this point, the right defense may shoot the puck at the goal (Illustration 11), skate in on the cage and then shoot, if he is not covered too closely, or he may pass the puck to his left defense parallel with him in front of the goal (Illustrations 5, 6 and 12). If the right defense player elects to shoot at the goal, the wings and the center converge instantly on the cage and at-



Illustration 10



Illustration 11



Illustration 12

tempt to push in the rebound, if the first shot does not score. If a score is not effected and the goal guard sweeps the puck to the side, the play may immediately be started again with the right wing racing after the puck and going through the same procedure as he did in the first part of the play. At this time, if an opponent reaches the puck first, the wing should quickly attempt to gain possession of it, before it leaves the attacking zone. Sometimes, a desperate defense player, upon getting possession of the disk in this situation, will shoot it wildly up the ice. The wing should not attempt to impede its progress, as it will probably be stopped by one of his own defense players, and the result will be the same as though the wing himself had passed the puck back.

It is important for the player to remember that, in the power play there are usually opponents between the attacker and his team mates, and that, when this is so, he

should use the flip pass over the sticks of the opponents, so that they cannot intercept his passes.

In playing this type of hockey, it is vitally important that the defense players be quick on their feet and possess hard and accurate shots. They should learn to move quickly, when they expect passes back from team mates or opponents and they should try to anticipate what the opponents are going to do with the puck, if they get possession of it.

One of the points for the defense to remember is that, whenever there is a loose puck in front of them, they should never go forward to get it unless they are certain that they can beat the nearest opponent to it. If they miss in this case, the opponent has a clear jump down the ice with no one in front of him except the goal guard. This usually results in an opposing score. Whenever the opposing team gains possession of the puck and is advancing down the ice with it, the defense men should quickly retreat toward their usual positions to stop the attack.

Of course, the whole procedure is re-

versed, if the puck is shot by the center into the left-hand corner, or if the puck moves into the left-hand side of the rink when the goalie clears a shot to that side (Illustration 7). In this case, the work of the forward line is reversed and the left defense takes up his position along the left-hand side boards, while the right defense is parallel with him, in front of the goal.

Lately, the opponents have taken to lifting the puck between the two defense players to break up the play. This is the point at which the defense should anticipate the shot and try to block it from going down the ice.

A good thing for defense players to remember is that, when the opponents are short-handed, they can play a little closer in on the goal, thus opening up more scoring possibilities. In this situation, the defense and the entire attacking team should be more than usually alert and quick in their movements, because the opposing icing of the puck does not call for a whistle.

One of the variations of the power play

is the use of a four-man attack rather than a five. In this case, the work of the forwards is the same, but only one defense player is inside the blue line, skating back and forth across the ice. The other defense man plays back in the neutral zone in his usual position to be an added protection, in case an opponent suddenly breaks through with the puck. This form of the power play has proved very successful in the last year or two.

Occasionally, when a team is behind with only a few minutes left to play, it gambles to win, by taking out its goal guard and putting six forwards on the ice, in order to carry out the power play to its fullest extent. In this position, one of the forwards is designated as the goal tender by the coach and is told to play in the attacking corner, opposite from that in which the puck is at the moment, or in the middle of the rink between the two points. In either of these positions, he can aid the attack materially and, yet, the instant the defense gains possession of the puck, he immediately skates toward his

(Continued on page 26)

# Keeping Beginners in Wrestling Interested to the End of the Season

By Richard K. Cole  
Brown University

HIGH school boys and many college freshmen who report for the school wrestling team do not know much about the sport. The coach has had the task of presenting, during the early part of the season, the objectives and rules of the sport. He has found it necessary to instill in the beginners a confidence in themselves, by making them believe in their ability to learn and progress. He has put emphasis upon the need of strengthening the body muscles and developing balance. He has presented a carefully planned series of calisthenics, bridging, push-ups, running and weight work.

Then, followed the first lessons in wrestling proper, the coach ever mindful that too much can not be given in one lesson. The lesson on the referee's position while standing was an important one. With the right hand on the partner's neck and the left hand on the partner's near elbow, the beginners were taught how to push each other around and attempt a twist to the mat. A lesson that developed balance. The second step in the coaching of a wrestler included three good take-down holds or go-behind combinations—the leg dive, cross-buttocks and ankle grasp, elementary but effective.

The referee's position on the mat and the referee's position behind called for the coach's consideration next. Balance first of all had to be stressed. The beginners had to be taught the correct position—knees spread, rump down and head up; they had to be taught how to stay on their knees when underneath on the mat; how to brace themselves from being carried to the side or abdomen; how, when behind, to keep control of the opponent by pulling him to his side or abdomen.

At this point the coach has found his squad ready for a few pinning combinations, the half nelson and body, the half

nelson and crotch and the half nelson and wrist holds. After the pinning combinations the escape holds and maneuvers, such as the sit-through, double wristlock and the side-roll.

In wrestling, as in other sports, fundamentals must be practiced continually to the end of the season, the coach's important duty being to plan that the wrestler's interest is kept up. This may be done in several ways. Each day the men should wrestle under pressure and under match conditions with all the rules carried out to the letter. Weekly tournaments with prizes, when possible, for the winners keep a squad interested. A wrestler's interest is increased, when he is called upon to referee an intra-squad bout.

Young wrestlers are interested in learning what the wrestlers in other schools are doing and in reading about champion amateur wrestlers and in studying their favorite holds. The particularly proficient veteran wrestlers in the school are always watched with much interest by the beginners. An opportunity should be given the new men by the coach to ask questions about the demonstrations made by these older men. The veterans, too, can assist the coach by showing the beginners their combinations and pet maneuvers.

---

Illustration 1 shows the start of a sit-through as A sits through as a means of escape. From the referee's position, A (in black tights) throws his left leg out and lands on his rump.

\* Illustration 2 shows that A has pivoted and dropped his head and left shoulder in close to his opponent. He has also come to his knees.

---

Illustration 3 shows that A has quickly turned into his opponent and lifted his head and shoulders to a position where he is behind and gaining control. Perfect timing and speed are important.

---



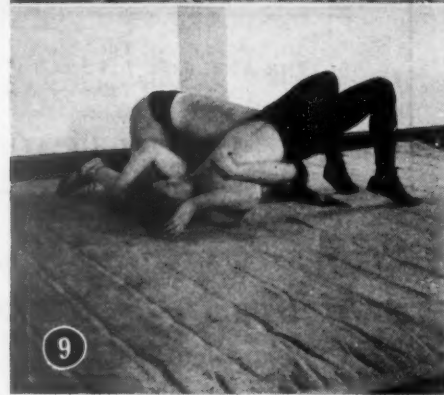
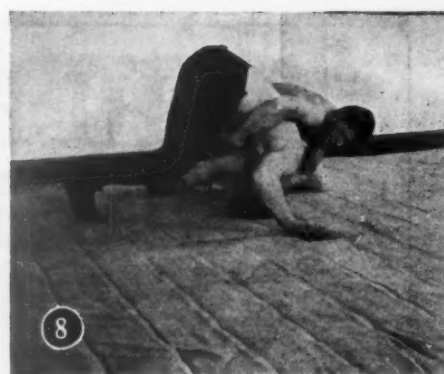
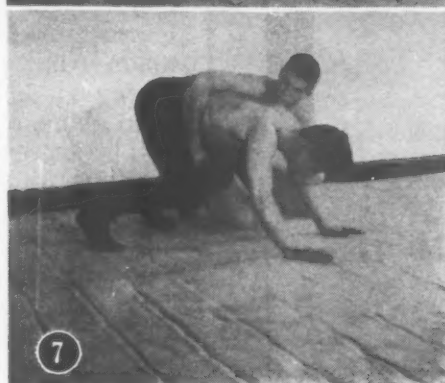


Illustration 4 shows that A has come to his feet in an effort to escape. He must stay well-balanced and work fast. Notice his feet are well-spread and his head is forward.

Illustration 5 shows A grasping B's wrists and throwing his head back and his abdomen forward in an effort to break the hold. A pulls and jerks B's hands apart.

Illustration 6 shows that A has broken B's grip. From here, A pushes B's hands down hard and quickly turns into face B in the neutral position. Balance and strength are needed for this maneuver.

Illustration 7 shows the start of the head-spin, an escape movement. A must have his legs free from B. A rises slightly from his knees.

Illustration 8 shows that A has ducked his left arm and head under close to B. It is important that the wrestler is off his knees in order to have power to push with the legs.

Illustration 9 shows that A has thrown himself over B's arm and shoulder by kicking his feet hard and snapping with his feet and shoulders.

Illustration 10 shows that A has broken B down by his weight and momentum, falling on B's arm. From here, A turns to his abdomen and is free. This maneuver is not a somersault but a snap of the neck and shoulders.

Illustration 11 shows the reverse wrist lock. A maintains the grip firmly and puts all his weight on B's chest.

Illustration 12 shows the reverse key lock gained from a reverse wrist lock. A has thrown his left hand up and wrapped his right arm around B's wrist. A's left hand then rests on his own upper arm.



# The ATHLETIC JOURNAL

Nation-Wide Amateur Athletics

Vol. XIX

February, 1939

No. 6

Published by  
THE ATHLETIC JOURNAL PUBLISHING CO.  
6858 Glenwood Avenue  
Chicago, Illinois

JOHN L. GRIFFITH, Editor

## Professional and Amateur Athletics Do Not Mix

THE high school and college coaches who try to mix professional and amateur athletics are working against their own self interests. It is an historical fact that whenever a sport becomes highly professionalized, the amateur part of the sport declines. Further, it is a truism that, when the amateurs in large numbers turn from a sport which has become highly professionalized and engage in sports that are strictly amateur, the professional top of the sport pyramid suffers.

Some fourteen years ago the ATHLETIC JOURNAL called attention to the fact that amateur baseball, especially in the towns and villages, was declining, as judged from the standpoint of player participation. It may be of interest to students of sports to analyze the reason for the increase or decrease of interest in a given sport.

Let us take as typical a situation in a certain county in Illinois. Years ago in Town "A," there was no school or town baseball being played. Some of the boys in the high school organized a school team which attracted a great deal of interest on the part of the town folks. When the spring term in that school ended, some of the best players on the high school team, supplemented by some of the local young men and boys, organized a town team. This team played a schedule of games with four other town teams in the county. For a number of years this informal county league was successful. Then, it developed that some of the other towns loaded their teams with one or two or more paid players with the result that ultimately all five teams in this county league were operating on a semi-professional or professional basis. Professional baseball is not a paying venture in very many of the large cities and, consequently, it was not a paying business in any of the five towns in the aforesaid county league. The attempt to maintain professional baseball, however, on the part of these five towns continued for a while, then gradually the local promoters, growing tired of attempting to raise

the money with which to pay the players, abandoned the game and consequently for the last fifteen or twenty years there has been practically no baseball of any consequence played by the five small towns in this county.

We have previously mentioned the fact that a Frenchman by the name of Mosso back in 1904 made a study of various American institutions and wrote his impressions of them. One chapter in the book was devoted to athletics. This gentleman stated, "When a sport becomes highly professionalized, it declines as an amateur sport." Certainly any student of baseball must realize that this grand game has declined in America because an attempt was made to mix professional and amateur baseball. An attempt is being made this year to revive the amateur game. We hope and believe that the effort will be successful.

While we do not wish to seem pessimistic, that which happened in the case of baseball may ultimately occur in college football. A gentleman who has been connected with college football for more than forty years told us the other day that, in the early days, his university subsidized its players. Some twelve or more years ago, the authorities at this institution decided that they would abandon, once for all, the idea of maintaining football on a paid player basis. Since that time not a single athlete in that institution has been subsidized in any way whatsoever. In recent years, the teams representing that university have not been highly successful; consequently, according to this gentleman, a few of the alumni and faculty are suggesting that an effort again be made to recruit and subsidize the football men. He added that the majority were not in favor of this suggestion but were proposing instead, that the institution give up football as an intercollegiate sport. The experience of this university may be compared to that of Town "A" heretofore mentioned in regard to its experience in baseball.

We have frequently contended that the majority of our institutions of higher learning were attempting to maintain amateur athletics. We have pointed out that probably none were 100 per cent perfect, because sports are administered by human beings and human beings are not perfect. There has, however, of recent years been an alarming growth of semi-professional or professional football in certain colleges and universities. If the time ever comes that the majority of the colleges of America adopt the plan of paying their players, then a great many of the institutions located here and there will react the same way that the alumni and students of the college to which we have just referred have reacted, namely, they will advocate dropping football as a collegiate sport. One prominent conference in the United States has gone on record to the effect that, if the time comes that football in that conference becomes highly professionalized, the conference institutions as a body will drop the game.

A number of coaches in a certain district where high school athletes were signed and hired, in an informal meeting some months ago talked about this

situation and all agreed that, as a result of what was being done along this line, ultimately the game as a college sport in that section would be ruined.

It takes a great deal of perseverance and character on the part of those who believe in amateur athletics to see that their own sports are conducted purely on an amateur basis. We repeat that, if the coaches do not do their part toward preserving amateur football, the time will ultimately come when this game will gradually decline as an amateur sport in the colleges.

## **Legislation vs. Education**

AT the recent Holiday Meetings of the National Collegiate Athletic Association, the Football Coaches Association, and the Society of Physical Directors, the thought was expressed by a number of delegates to the effect that an attempt should be made by some organization to classify the colleges that are maintaining their football on a paid player basis and those that are attempting to promote only amateur athletics. The colleges and universities in this country may be divided into three classes: first, those that pay for the aid given athletes out of university or athletic department funds; second, those that, although they refuse to pay for athletic scholarships or other athletic aids out of university or athletic department monies, do not object if the alumni or others pay the players for the time spent in training for the games and playing them; third, the institutions that are attempting to maintain their football strictly on a non-paid-player basis.

There is much to be said for the idea that the institutions that fall in the first two categories should play exclusively among themselves and those that treat their athletes just as other students are treated should schedule exclusively teams that fall within this classification. From the standpoint of competition, it is not fair to ask a boy who must work three or four hours a day in earning his board and room to play against another whose living expenses are paid by the university authorities or others. The proposal, however, that the colleges be segregated in terms of the practices followed relative to recruiting and subsidizing presents certain problems. First, it would be possible, perhaps, to ascertain what institutions contribute money from any official fund for the support of athletes, but it would be more difficult to determine how and if the alumni or others pay for the subsidies granted. If, for instance, the authorities of institution "A" maintain that their teams were made up solely of amateur players and it was found that a group of alumni were supporting one athlete, would that institution be dropped from the accredited list? Perhaps the test would be whether the institution was willing to disqualify the athlete in question. Someone would have to determine whether the aid given by an alumnus or someone interested in the success of the football team at the institution in question was legitimate or illegitimate. This would mean that the colleges would surrender some of their rights and responsibilities.

Experience teaches that, when power is placed in the hands of a central authority to enforce laws or rules, the local authorities generally are willing to let George do it. This is well illustrated in the case of the Volstead Act. You will recall that local authorities, generally speaking, were willing to let the Federal Government try to enforce the Volstead Act. Very little help was given the federal law enforcement agents by local or state authorities. The task was too great for the Federal Government and the law bogged down. If an individual or a committee representing, let us say, the National Collegiate Athletic Association were asked to assume the responsibility of policing the colleges of America and of determining which institutions were good or bad, some of the local colleges would most certainly construe this as meaning that they no longer had any need to worry about keeping their own house in order. It has been pretty well demonstrated that we cannot make men good by legislation.

Most students of social problems will agree that more lasting progress is made by education than by compulsion. We agree that something must be done in the interests of the institutions that favor amateur athletics. We do not believe that it is the part of the educational institutions to maintain their football activities on a professional basis. Such institutions may be trusted to work out their problem in their own way.

## **Baseball in the High Schools**

IN the January issue of the *ATHLETIC JOURNAL* we commented on the fact that this year we are celebrating baseball's One Hundredth Birthday Anniversary. A great deal of effort will no doubt be expended along the lines of promoting more amateur baseball. There are more professional leagues today than there were fourteen years ago when the *ATHLETIC JOURNAL* conducted a campaign designed to assist in preserving amateur baseball. This means that the top of the baseball pyramid is in a healthy state but that the amateur base has been weakened.

On another page appears an interesting story relative to the development of high school baseball in the state of Iowa. Undoubtedly a great deal of the credit for the success of the tournament belongs to Mr. DeKock. Had it not been for his enthusiasm, we doubt if baseball would have been conducted in 664 high schools in the state of Iowa as was the case last year.

With little or no professional athletics in Iowa and with a press devoting a great deal of space to amateur athletics, the state presents a splendid opportunity for the development of amateur sports such as high school baseball. We congratulate the men who are responsible for the attention given amateur athletics in the state of Iowa and point out that what they have accomplished may be achieved by the high school authorities in more of the states.



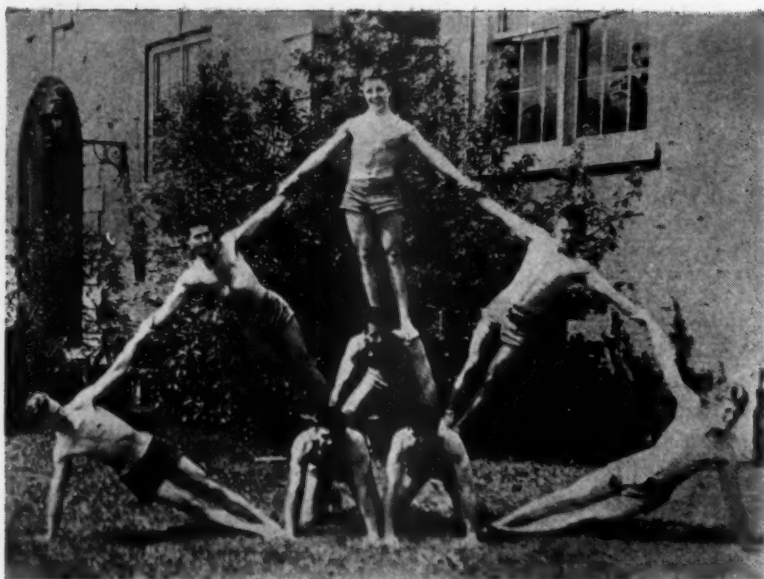
# Fundamentals of Pyramid Building

By

Hartley D. Price

Assistant Professor of Physical Education  
University of Illinois

Director of the Gymkana Troupe and  
Varsity Gymnastics



Convex pyramid with the peak in the center.

**P**YRAMID building is an art which utilizes human forms for the creation of symmetrical and beautiful patterns. As such, it lends itself favorably to the program of physical education. It is a phase of the program which may interest the beginner and the advanced student alike; it attracts both sexes of all age levels; it affords participation for the large group as well as for the small. From the viewpoint of the teacher, it is advantageous, in that it can be used effectively for regular classwork for demonstration purposes, without the dressing up, that demonstrations often demand. Pyramid building is an example of the work that actually is done in the physical education class. In addition to participation, it affords opportunities for: (1) the development of creativeness, since any member of the group may suggest improvements of new or different arrangements of the patterns; (2) problem-solving, since any individual may help decide the most suitable or the most effective position for an individual, or group of individuals; and (3) the development of leadership qualities, since leaders are in demand for the different sections of the pyramid.

The success of this artistic expression depends upon several factors:

1. A sound base or foundation in order to insure the pyramid against collapse. The strongest, heaviest individuals should form the foundation.
2. The proper distribution of the load. The lightest and most agile individuals should form the top of the pyramid.
3. The unified precision of the entire group. Each member knows exactly what is required of him.
4. The complete co-operation of each member, together with confidence in his fellow performer.
5. A certain flexibility that permits adequate adjustment (give, elasticity) among the group and insures against collapse.

6. Simplicity of design rather than difficult and intricate patterns.

7. Smoothness and grace with which the performers dismount and return to their respective positions.

## Types of Pyramids

Pyramids may be built on apparatus or on the ground. They may be built effectively upon all types of apparatus, on barrels, tables and chairs, parallel bars, high bar, horse, buck, rings, ropes or ladders. Ground pyramids may be stationary or movable. The movable pyramids require a highly-skilled personnel if they are to be executed properly. Combined pyramids on apparatus and ground pyramids are formed by utilizing both the pyramids on various apparatus with ground pyramids (no apparatus) to form the complete pattern.

As to form pyramids may be: 1. Convex—with the peak in the center (See illustration above). This refers to the total pyramid rather than to part of it. 2. Concave—a hollow in the center, with the peaks at the ends. 3. Combined. For large group, pyramids may thus combine convexities and concavities.

Pyramids are composed of units, depending upon the size of the group. They may be single, double, triple or quadruple. The units, when placed together, produce the finished pyramid. These units may be in the form of a square, circle, diamond or straight line. The units for line pyramids are usually composed of center pieces, end pieces and single positions for tapering off the pyramid, such as a side support holding the hands of a person or a head balance.

The ordinary line pyramid is made up of a center piece and end pieces. These center pieces may utilize a varying number of participants, depending upon the general pattern to be made or upon the

size of the group that is available.

The end pieces that are represented in the illustrations offer to the teacher suggestions for the building of a great variety of simple pyramids. In general, a center piece is built up and then it is balanced on each end with similar pieces in order to produce a symmetrical pattern.

The pyramid, thus, may be of a two, three or four-unit construction. The end or center pieces that use two men might be, for example, (1) sitting on the shoulders, (2) standing on the shoulders. Most of the examples represented in these illustrations use three men. Examples of a more advanced type were presented in connection with the three-man pyramids that were described in the January issue. It is readily seen that the possibilities of the end pieces are innumerable.

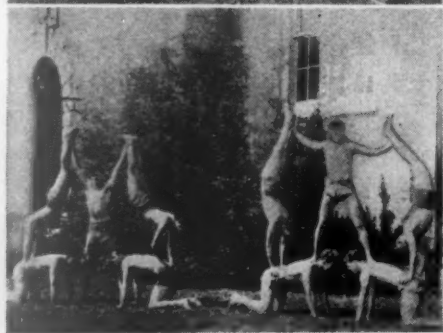
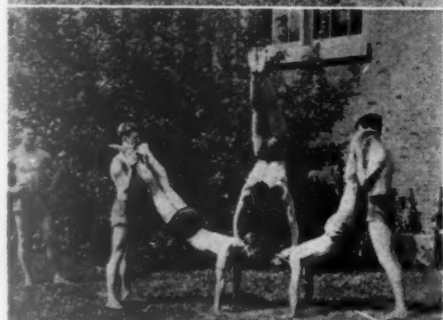
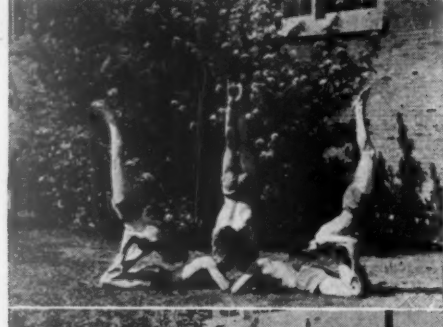
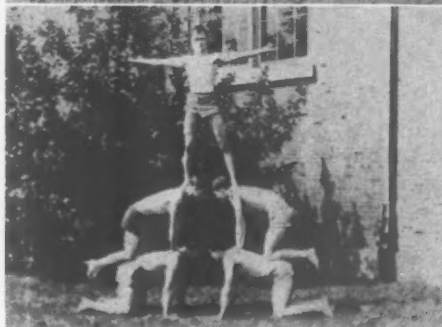
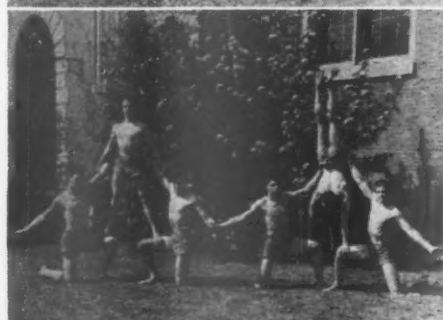
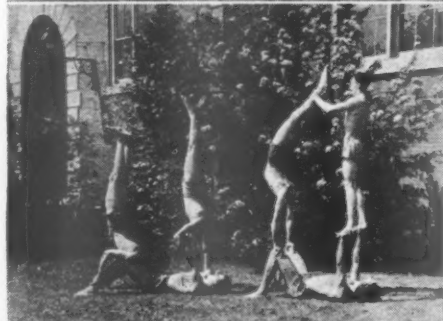
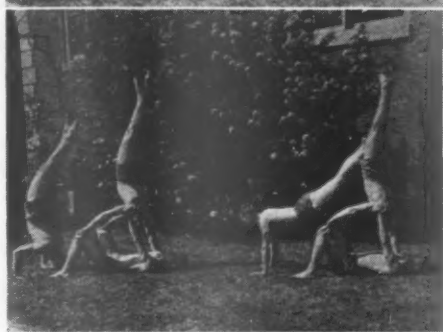
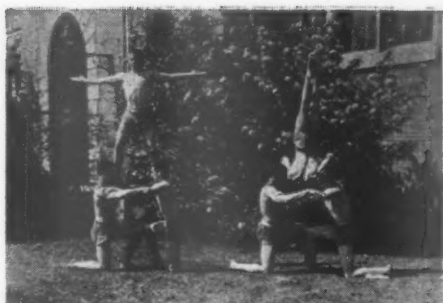
Although these illustrations serve as possibilities for end pieces, they may be used effectively as center pieces if the teacher so desires. The convex pyramid, shown in the first illustration would be a very effective center piece.

## Building the Pyramid

Directions for building the pyramid are as follows: 1. Start from a straight line. 2. One individual, acting as captain or leader, should call the cue numbers. Count 1—Bottom men assume positions. Count 2—Top men assume starting positions ready to mount. Count 3—Mount—Everybody in position. Hold! Count 4—Dismount and back to the straight line. 3. The count may be increased when large groups participate. 4. The count may be reduced for a skillful small group. 5. Music may be substituted for counting. 6. Singing may be substituted for counting. In such an instance, part of the song, for example, the beginning of each line, serves the same purpose as one number.

Pyramid building requires patience, de-





termination, co-operation, precision, skill, strength, agility and confidence.

Safety should be given consideration in pyramid building. The equipment should be tested periodically. Parallel bars may snap under pressure of excess weight. Proper spotting and guarding of individuals should be provided while they are learning their new positions. Individuals who occupy precarious positions in the finished pyramid should be guarded as much as possible by members of the group, in case of an emergency.

#### *Hints on Pyramid Building*

1. The group for pyramid building should be comprised of individuals who have practiced diligently together, if the pyramid is to be used for public display.

2. Simple pyramids which are well executed are more effective than intricate or difficult formations which are poorly executed.

3. The students in the class should be encouraged to contribute their ideas toward the design of the pyramids to be built.

4. The members of the group who get into position first should then assist other members into position.

5. The pyramid is effective when every performer faces the audience, as nearly as possible, without appearing awkward.

6. Grace of position should be striven for.

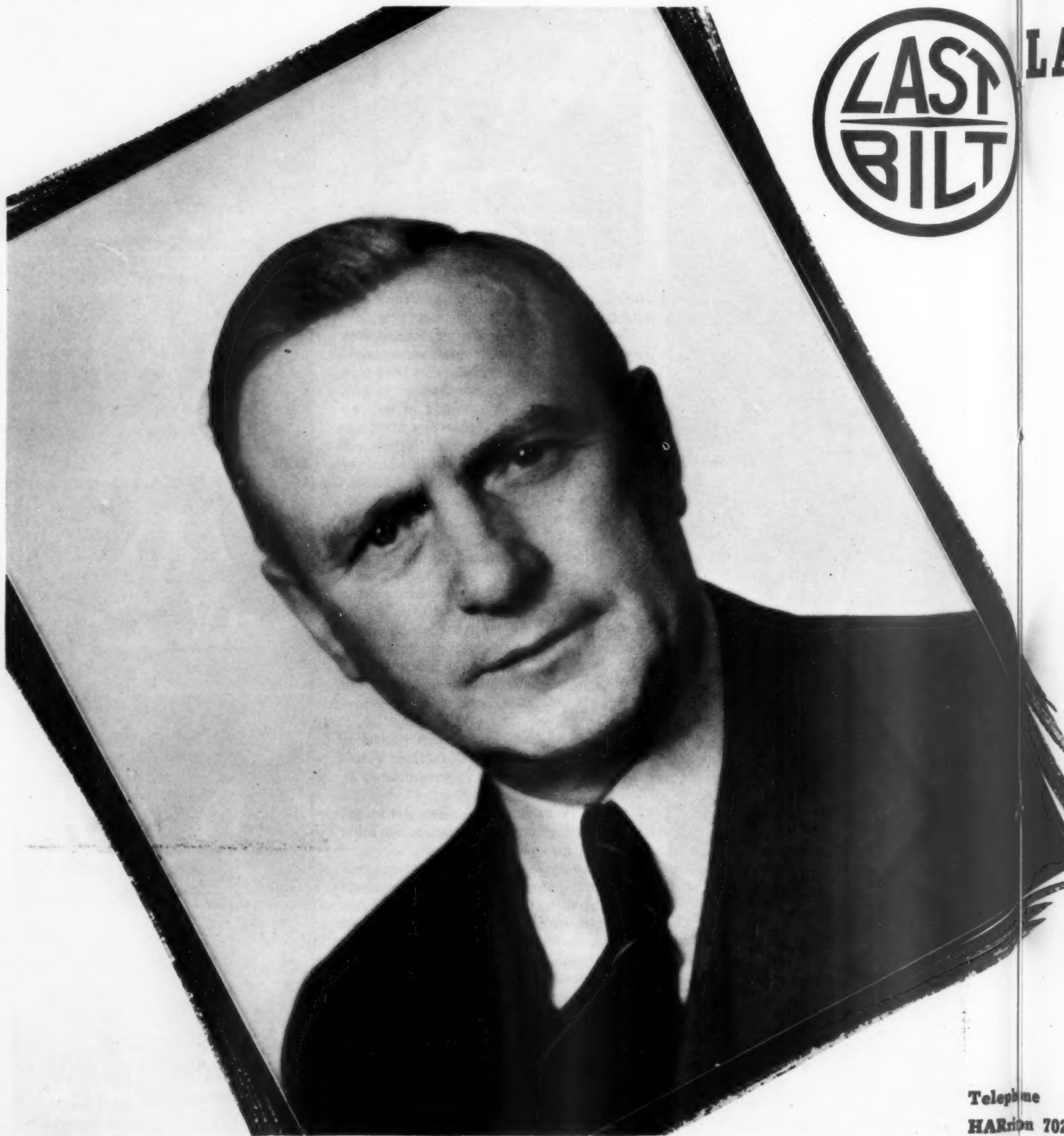
7. Pyramids should be held long enough to interest the audience but not so long that any participant is unduly strained.

8. Perseverance — practice — diligence lead to success.

9. If the beginning group is satisfied with unpretentious, but well-performed designs, it should be able to work together toward progressively more difficult and more advanced patterns.

# BASKETBALL EDUCATION

*Announces the director*



Telephone  
HARRISON 702

# **CATIONAL BUREAU**

*director of the new*

## **LAST-BILT PRODUCTS ACTIVITIES**

*a a Schabinger*

College and university graduate, with A.B. and B.P.E. degrees—director of athletics and coach of basketball, with a twenty-year average of .802—resigned as coach to enlist in World War—is a member of the American Legion—past president National Basketball Coaches' Association of America—past member of the Basketball Rules Committee—former chairman A.A.U. Basketball Committee—Official in National A.A.U. Basketball Tournaments for thirteen years—recognized football official in Western Conference and Missouri Valley—basketball instructor in nationally known summer coaching schools—director of Inter-collegiate athletic tournaments for selection of Olympic basketball team—field education work introducing Last-Bilt basketball, two-and-one-half years.

On such an impressive record the Basketball Educational Bureau rests the directorship of the Last-Bilt Products Activities—to carry on an educational program, particularly in basketball. These activities, however, are to be in the interests of Last-Bilt Products as a whole, rather than for any one manufacturer—with a definite purpose of introducing the economies and perfect playing qualities of Last-Bilt Products, and, to further and create a greater acceptance. Last-Bilt Products have been tried and tested and have proven worthy of such an educational program—particularly because of their lasting sphericity, lasting uniformity in size and weight and the greater saving, irrespective of the purchase price, that is possible with its two to three times longer playing life. Mr. Schabinger will confine his activities to the interests of all licensees, licensed under the Last-Bilt patents, numbers 2,086,094 and 2,116,479 and its registered insignia. His work will clarify the advantages in the use of Last-Bilt Products and foster an assurance that the Last-Bilt Products cannot be substituted for in their superior qualities of play and economy.

*For any further information, write or call*

### **BASKETBALL EDUCATIONAL BUREAU**

**Room 1727 — Republic Building**

**209 South State Street**

**Chicago, Illinois**

Telephone  
ARion 7025

*for* FEBRUARY, 1939



# A Coach's Instructions to First Basemen

By H. S. DeGroat  
Springfield College, Springfield, Mass.

**T**HE qualifications that we look for in a first base candidate are: a good physique to make a good target at which to throw; the ability to catch all kinds of thrown balls, long range, low, high, fast or slow; the ability to cover his territory; the ability to diagnose the type of offense and defend against it; and the ability to hit. Weakness in any one of these qualifications may mean the difference between a regular in the line-up and a regular on the bench.

Naturally, a coach will take a shorter man who is fast on his feet and can get up off the ground to snare a high throw, in preference to a big man if the big man is weak in any of the points just mentioned. The big man, however, is preferred if he has the stuff because he makes a fine target for the throws of the infielders.

## Fielding Suggestions to the First Baseman

Your greatest problem is to catch the bad throws coming from the infielders and still make your put-out. You must show that fine judgment of *how* to snare that pick-up or just *where* you will take that bouncing ball. You must know when it is proper to leave your base and when it is not proper to let that foot slip off the bag, as you attempt to catch the thrown ball. You must know when an inside target is most needed and when the outside target is regular. You must know where to take your position for every situation that arises during the game.

Now what are the answers to some of these? Some say that the best way to handle a bouncing ball is to take it at any one of the following three places. First, just as it hits the ground, or in the pick-up position. This is easy and can be used if the bounces allow you to contact the ball and you still have one foot on the bag. Another time to take the ball is at the peak of the bounce and the third is to take it just as it starts down from the peak. If you have been too nervous when the bad throws are coming, you should stand there and let someone throw some bad ones at you until you lose all tenseness. A good ball player cannot be tense. Tight muscles do not allow quick, free and accurate movement.

Where will you stand with no one on bases? The usual place is five steps toward second and just over eight steps directly back of that point or a place fifteen feet toward second and twenty-five

behind the base line. From here you can move quickly to your base on any ball hit to the infielders or to the pitcher.

What is your foot position now? I like to have my first baseman have both heels near the bag and face the player who will be making the throw. You can easily shift according to the throw. If it is directly at you, put one foot, the natural one for you, on the bag and *reach out* for the ball. This often means the difference between a put-out and a hit. If the ball is to your right, put the left foot on the bag and step out to that side and make the catch. If it is to the left, do the reverse.

You must stretch all you can to the right and still keep contact with your base. You must exercise your own judgment to tell you when to step away and keep the hitter from going to second because you could not reach the ball. You can more readily leave your base on the left because you can catch the ball and tag the hitter as he passes in front of you. Stretching for the ball, however, makes quicker put-outs and is best, if possible.

What do we mean by *inside target* and *outside target*? An inside target is that position in which the left foot is on the bag and the right well inside the playing field so that the pitcher or catcher who may be fielding the ball near the base line will have a real target at which to throw. This gives a target away from the base line and the runner who must stay inside the three-foot line as he nears first.

The outside target is that position in which the right foot is on the base and the left is in foul territory. This position is taken when the batter is running out a dropped third strike. It gives a direct target to the catcher and will not cause the ball to cross the path of the runner and is less likely to result in the runner being hit with the ball.

## Drag-Hit Play

One of the toughest problems for the first baseman and pitcher to solve is the drag-hit situations that arise. I have seen games won and games lost because of this problem. Here comes a hit ball to the territory of the first baseman, the pitcher is crossing over to the base, the second baseman is cutting across to get in the path of the ball or to cover the base or chase an overthrow. If the first baseman moves toward the ball and then decides that he cannot make it and backs up to his base, you see the ball go on out to

the outfield. The *rule* is that, if the first baseman goes for it, he must keep going.

I prefer that the first baseman toss the ball on nearly all of these plays. There are some situations in which a throw must be made or no put-out will result. But in most cases the ball can be tossed. Where? To the base? NO! To the pitcher's heart and two steps ahead of him. Why? Well, this allows him to catch the ball and then step on the base. I have seen a pitcher step all around a base, but catch the ball thrown to the base and the runner called safe. Why try to do two things at once? If necessary to help the timing of the play, you should take one or two steps as you toss to the pitcher. The good pitcher will attempt to take a curving course that will allow him to come down the base line ahead of the batter. However, there will be times when only a straight course is possible for him. There will be situations in which the pitcher must pivot off the base after the put-out to keep other runners from advancing.

## With a Runner on Base

With a runner on base, your left heel should be on the base line near the base and your right heel just around the corner of the base that is toward the pitcher. This gives half of the base to the runner. Take throws from the pitcher and turn to the right to tag the runner. If the runner is far off, you can drop your right foot outside the bag and put the ball down on the side of the bag, thus allowing the runner to tag himself out as he slides in. To turn left to tag a runner may allow the runner to pull the delayed steal of second.

## Playing Bunts

When a bunt is in order you must be prepared to field accordingly. If a left-handed batter is up, you will not need to run in as far as you do if the batter is right-handed (Refer to diagram).

## Position on Situations

There appears to be a uniform distance that infielders move when shifting because of runners on base. The second baseman moves in directly toward the batter when a runner is on second. The shortstop moves the same distance toward the base. The second baseman moves the same distance to his left and deeper when a left-



# YES, ATHLETES HAVE CHANGED...

**and so have Certain Basic Ideas about a Good Training Diet!**

Maybe the "Handlebar Moustache" era thought a hot cooked breakfast was necessary in winter. But you know that whether whole wheat is served hot or in a ready-to-eat form like Wheaties its "heat-energy" content remains the same! For year around training, eat a "Breakfast of Champions!"

Way back when a turtle neck sweater covered many a hearty appetite, athletes used to think that a good breakfast for winter training had to be *hot* to be nourishing.

Today we know that's not the case at all. Actually, it's not the heat of *cooking* that keeps you warm in cold weather. It's the number of "heat-energy" units in the food that counts!

That's why we say you're doing yourself a real good turn when you call for Wheaties these chilly mornings—a generous bowlful of those crisp-toasted whole wheat flakes with milk or cream and fruit. That's a "Breakfast of Champions"—the ready-to-eat "heat-energy" breakfast hundreds of modern athletes are eating this winter.

You see, those crunchy Wheaties flakes are *whole wheat*, brimming with important food values, including a big supply of "heat-energy" units we need when Old Man Winter is doing his darndest to wear down our stamina and energy. *And the*

*whole wheat in Wheaties furnishes the same number of needed "heat-energy" units as an equal serving of the same grain would supply in hot cooked form!*

What's more, Wheaties bring you whole wheat in a new form that's especially tempting to the appetite—crisp, golden-brown flakes that *look* so good to eat and *taste* so good that millions of people now enjoy Wheaties morning after morning.

**Enjoy This "Breakfast of Champions" Tomorrow!**

A big bowlful of Wheaties, milk or cream and fruit is a complete, well-rounded meal in itself—one that provides many food values needed by growing athletes the year around. Muscle-building proteins! Those important minerals, calcium and phosphorus! Vitamins A, B, C and G! And a wealth of food-energy, the "food-fuel" that's the largest single requirement in a good training diet!

Tell your players about this delicious, "heat-energy" dish, a "Breakfast of Champions." Enjoy it yourself these winter mornings! You'll find those orange and blue packages of Wheaties at your grocery store. Ask for several today!



Wheaties and advertising claims for them are accepted by the Council on Foods of the American Medical Association.

# WHEATIES

WITH MILK OR CREAM AND SOME FRUIT

*"Breakfast of Champions"*



Wheaties and "Breakfast of Champions" are registered trade marks of General Mills, Inc. Copyright 1939, General Mills, Inc.



handed hitter steps up. This distance is usually about three and one half steps or ten to twelve feet.

Now from your position behind the base line, with no one on your base and a runner on second with none out, you should move in three to four steps. If first and second are occupied, you move in until you are just behind the base line.

Perhaps your coach wishes you to cover the cut-off position in front of home on hits to the outfield with a runner on second who may attempt to come home. This is only one of the things for which you must train yourself to think. You take a position in line with the outfielder who is fielding the *single* and the catcher and you act as a target for that throw. If the throw is late, your catcher should tell you to take it and you should be ready to throw to second, if the hitter attempts to go there on the throw-in. If the throw is wide, you should go after it.

To make the various situations and your position more clear I am diagraming them.

### Further Instructions

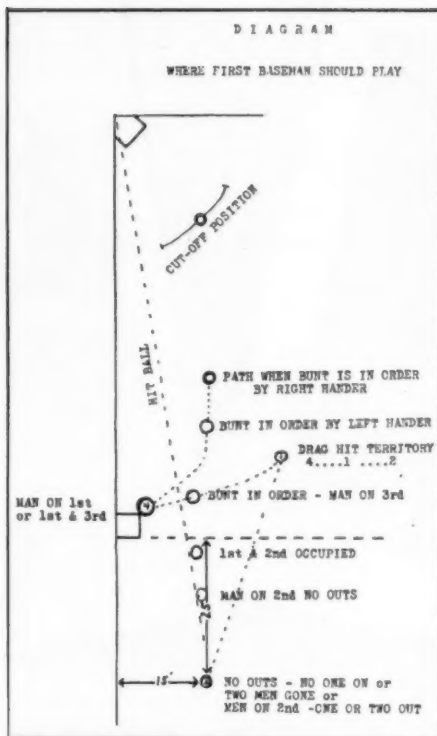
There are situations when you will be playing behind a runner on your base. It may be with men on first and second or two out and a man on your base with a hard hitting left-hander up. Now is there a chance of holding the runner to a short lead? Yes. A runner can easily be caught if you walk directly up behind him and then quickly cut for the bag. If you are two steps ahead of him, your pitcher can catch him off base. Remember this. Every throw from the pitcher does not need to be fast nor does it need to be thrown actually with the intent to catch the runner. It may be to hold him close. A slow throw from the pitcher, followed by a fast one as his foot touches the rubber again may succeed in retiring the runner. You, as first baseman, must be ready for this.

When is it proper for you to slide into the base for a put-out? If there is danger of your colliding with the runner, you can make just as fast a put-out by sliding into the bag, if running toward it for a close put-out.

Remember that, in fielding a runner close to the base line, you can field the ball and block the runner off rather than toss the ball to the player on the bag.

### Double Plays

Usually you turn to the right to make your throw to second on a double play, if you are right-handed. If you are a southpaw, you do not need to turn. You throw to the bag chest high, because this is the easiest ball to handle and return for the second put-out. The only time a right-hander should turn to his left is when fielding a ball to his left and he is already partly turned. Making a full turn may give more speed, but it takes the eyes of the player off the base and the base-



runner momentarily and causes wide heaves of the ball. Make your throw good for at least one put-out, and, if you are unable to get back to your base, let the second baseman take the return throw.

A good general rule for you to follow, when fielding your position is this. If you can cover more territory on one side than on the other, allow more space on that side and protect your weaker side. Read over the following conditions which are based on an even score and a right-handed batter. Think these over and be prepared to state what you would expect, if the batter were left-handed or if the score were not even, or if it were an early inning or if it were a late inning with one or two runs ahead, or with one or two runs behind. A good ball player can always show his knowledge of the game by the way in which he meets the various situations.

**CONDITIONS . . . Score even . . . Right-handed batter. (Vary this with left-handed batter and score.)**

OUTS	RUNNER	ON	PREPARE AS FOLLOWS
none	1st		Prepare to throw to second for double play or receive throw. Expect a bunt. Hold runner close. Hit and run may be tried.
one	1st		Same as above. Expect a steal.
two	1st		Play for batter. Expect a steal if good batter is up.
none	2nd		Play off the bag. Fast hit ball may be thrown third. Bunt may be tried. Prepare to take cut-off on any single.
one	2nd		Expect same as above,

OUTS	RUNNER	ON	PREPARE AS FOLLOWS
two	2nd		except a bunt is not likely. Play a little deeper.
none	1st-2nd		Same as above. Expect a bunt. Double steal sometimes. Play on base. Hold runner close or play set defense for expected bunt. Pitcher takes third base side, you take your side. Both prepare to throw third or to first if bunt is well placed. <b>BE PREPARED FOR CUT-OFF</b> on any single.
one	1st-2nd		Take position on bag, or play behind the runner. Watch for double steal. Be set for cut-off play. Bunt may be used if poor hitter is up and good hitter is to follow.
two	1st-2nd		Play back of runner. Play for batter. Watch throws to catch runner off, if dangerous batter is up.
none	3rd		Take short position. Prepare to throw home or force runner back. Squeeze may be tried.
one	3rd		Same as above. Squeeze more likely.
two	1st-3rd		Hold runner close. Play for the batter. Delayed steal may be tried if poor batter is up and a run is needed.
none	2nd-3rd		Same as with man on third, except prepare to cut-off on a single.
one	2nd-3rd		Same as above.
two	2nd-3rd		Play for the batter.
none	full		Play short position. Throw is generally home and then to first. Runners do not need to be touched. Take cut-off position on any single.
one	full		Take cut-off on hits. Expect a double play, 2nd to 1st, or coach may direct it home or to 1st.

## The Power Play in Ice Hockey

(Continued from page 16)

own goal watching for a long shot by the opponents. This player, of course, does not wear goalie equipment, as it would interfere with his speed which is important at the moment.

There are unexplored possibilities and variations of the power play and the team which spends some time practicing it will find its efforts amply rewarded.



# ATHLETIC HEADQUARTERS

## IN CHICAGO

Occupying practically an entire square block, rising 25 stories high, and providing 1700 guestrooms, Hotel Sherman is the most accessible and conveniently located hotel in Chicago.



1700 ROOMS  
1700 BATHS  
from \$2<sup>50</sup>

- Ideal headquarters for your teams, whenever they come to Chicago.
- Exceptionally comfortable beds with extra long sizes specially for big men.
- Special "training menus" gladly arranged.
- Convenient to all transportation and places of amusement.
- Home of the College Inn, featuring, always, a nationally famous orchestra.

---

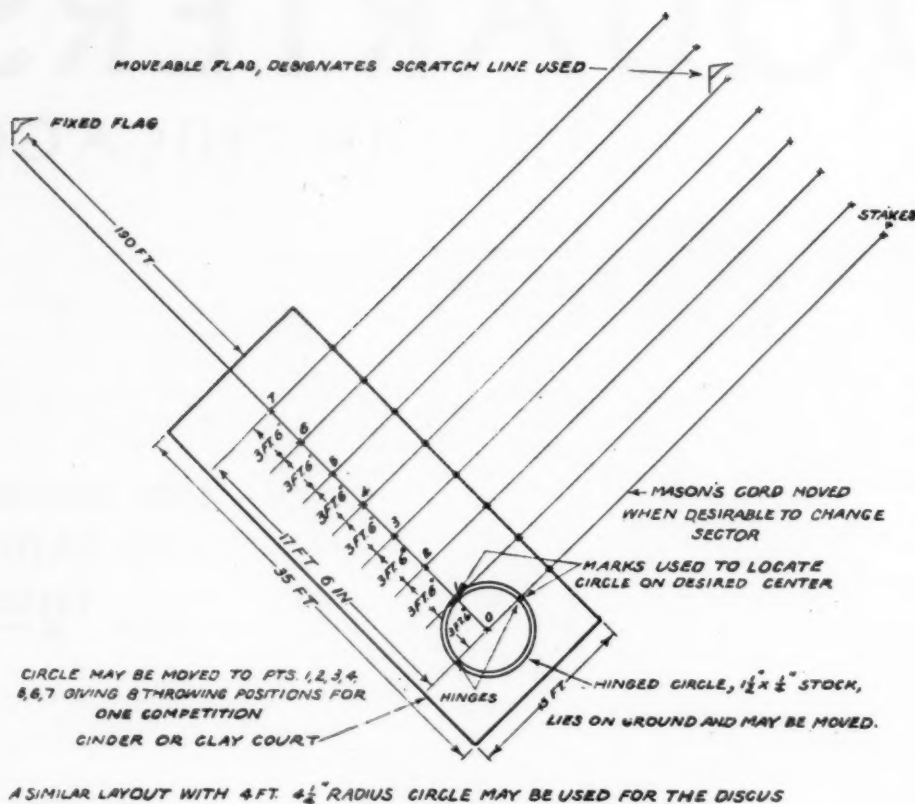
CLARK • LAKE • RANDOLPH AND LA SALLE STREETS

---

C · H · I · C · A · G · O

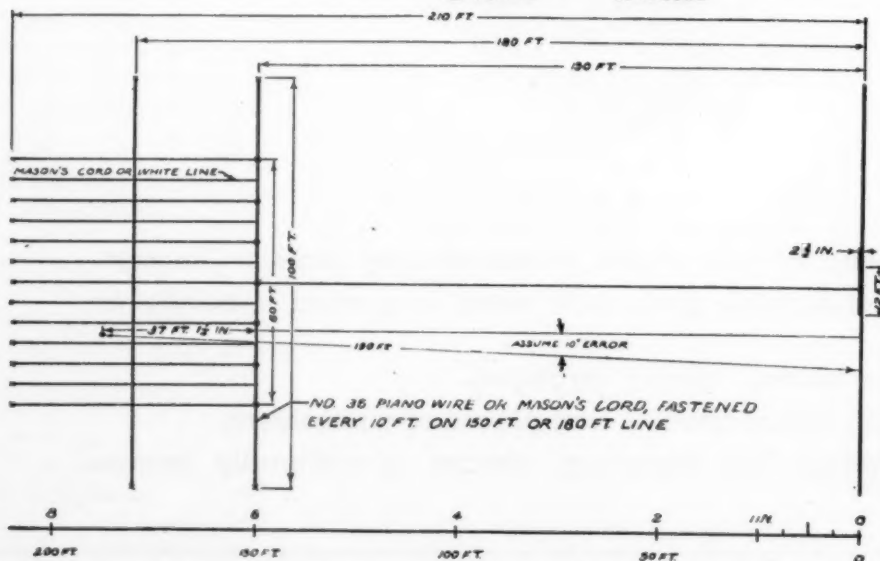
# Track and Field

PLAN FOR MOVEABLE HAMMER THROW CIRCLE  
CIRCLE MOVED AFTER ONE-THIRD OF COMPETITORS HAVE THROWN  
LAST TWO CIRCLES USED FOR THROWS OF TEN BEST COMPETITORS



COMMITTEE OF ASSOCIATION OF COLLEGE TRACK COACHES OF AMERICA

CHAIRMAN - J.R. BANGS, JR.      CORNELL  
JOHN MAGEE      SOWDOIN  
T.E. KEENE      SYRACUSE



JAVELIN LAYOUT (MEASUREMENTS MADE TO NEAREST 1/4 IN.)

MEASURED		37 FT 1 1/4 IN	WITH 10° ERROR:		
ADD		150 FT	MEASURED		180 FT
ACTUAL THROW		187 FT 1 1/4 IN	ACTUAL THROW		187 FT 1 1/4 IN

DESIGNED BY ASSOCIATION OF COLLEGE TRACK COACHES OF AMERICA

J. R. BANESS, JR.	CORNELL	CHAIRMAN
M. E. KANALY	LEHIGH	
A. MAHN	PRINCETON	

## Changes in the National Collegiate Track and Field Rules for 1939

By  
**K. L. Wilson**

### Chairman Rules Committee

THE National Collegiate Track and Field Rules Committee came together at Minneapolis for the purpose of considering suggested changes in the rules. The advice of the track coaches, present with their teams for the National Collegiate Meet, as well as recommendations sent in to the committeemen of the various districts beforehand by coaches and coaching groups were discussed and taken up for action by the rules' body. This co-operation on the part of the men actively engaged in the development of the sport is always a source of much gratification to those of us who are charged with the enactment of the regulations under which the athletes are to compete. After all, the coaches are working in the greatest testing laboratory possible, for trial and error elimination of the rules and the opinions formed through actual usage are of immense value to the committee. If, at every group meeting of track coaches, a short session might be set aside for discussion of rules and suggestions, and if a report, of any angle from which the committee can approach its goal—a short, concise, clearly-defined set of rules, universally understandable and practicably enforceable—might be sent to the rules' chairman of that district or to the writer, our work will be made much more effective and lasting.

The deliberations at Minneapolis were devoted to clarifications of a few rules now in force by the addition of suggestions in one or two cases and by a change in the "Question and Answer" section concerning starting blocks. The word "wooden" was deleted from the answer to the question, "Are starting blocks legal?"

A typographical correction in Rule 38, which has to do with the time schedule of outdoor meets, makes Paragraph B read that the starting time for the high jump, pole vault, javelin, or shot shall be thirty minutes before the first track event rather than thirty minutes before the last track event as was erroneously shown in the 1938 book.

Rule 31, covering the broad jump, was amended so that, if a competitor's toe crosses the scratch line, it shall be a foul whether or not a mark is made on the ground in front of the scratch line. The old rule allowed the trial to be ruled a fair jump, if the ground in front of the scratch was not marked by an impres-

sion from the spikes or shoe. Under the new ruling, the judge must determine without aid from marks visible on the ground after the trial, whether or not the foot projects beyond the line. This, calling for additional vigilance on the part of the official, will standardize the judging with Olympic requirements.

The use of tape or gauze bandages to protect injured wrists or fingers was made legal by changing the fourth sentence of Rule 32.

The incoming runner in a relay exchange is debarred from giving his relieving team mate the questionable benefit of a shove. This is covered by an addition to Paragraph 3, Rule 37.

It was decided to add a suggestion to Rule 13 that should help simplify matters for harassed officials who are anxious to get their events run off smoothly and on time. Hereafter, when a competitor in either the high jump or pole vault is excused to compete in a track event, he must return to take his missed turns before competing in any other field event. The wandering boy becomes at least that much less of a problem to the judges.

A much-discussed question was settled, we hope finally, by the insertion of a note into the rules covering the discus and hammer throws. The explanation designates any part of the line marking the sector as foul territory. This, of course, means that a missile striking on any part of one of the sector lines causes the throw to be ruled a foul.

## LAYOUTS for Javelin and Weight Events

**I**N throwing the weights in track and field sports, especially in the javelin many errors are made, in guessing the right angle measurements. By using the layout as developed by Mr. John Bangs, of Cornell with his committee, errors are reduced to a minimum. The diagram shows the new arrangements for this event.

For the hammer as well as for the discus, a series of circles may be used, thereby permitting the contestants to use fresh circles at intervals.

The Association of College Track Coaches of America have known for a long while that unintentional errors have been made. To eliminate these errors in the javelin, a committee worked several years perfecting a layout that would be almost foolproof.

In the measuring of the discus and hammer, the rules state that the distance to be measured must be on a line with the center of the circle. In the javelin, since there is no circle, merely a board to measure from, many mistakes have been made.

The Coaches' Association recommend these arrangements.



- Eliminate Drudgery -
- Save Time -
- Cut Costs -

and Have Finer . . .  
Firmer Tracks and  
Fields with the . . .

## TORO POWER ROLLER

The modern replacement for the old, time wasting, back breaking hand roller. Gives smooth lawns, level athletic fields, and smooth, firm tennis courts at the expense of a fraction of the time and man power of the hand type. It is a compact riding type with a weight of 1050 lbs. and a rolling width of 30 inches.

Standard equipment for many years at hundreds of our leading Schools, Colleges and Universities.

*Send for our New Power Mower Catalog*

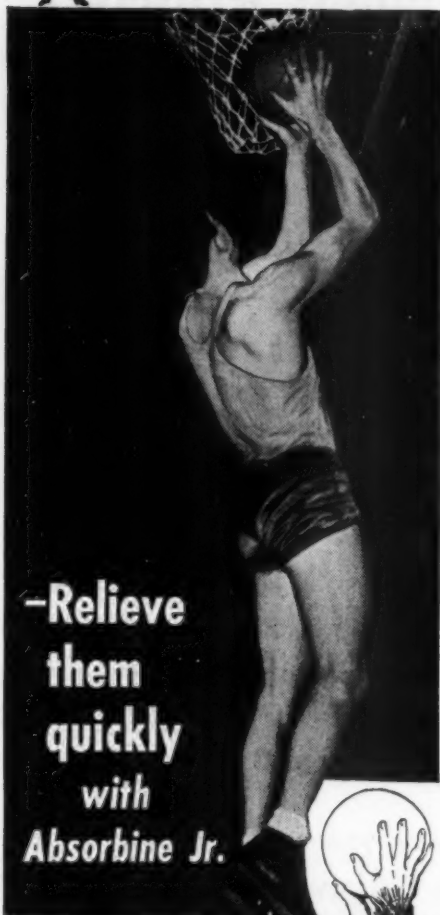
**TORO MANUFACTURING CORPORATION**  
MINNEAPOLIS MINNESOTA







WHEN SORE MUSCLES  
"RUIN" YOUR  
SCORING PUNCH



## Flush Poisonous **FATIGUE ACIDS** out of **ACHING MUSCLES**

SORE, TIRED MUSCLES can handicap the star of any team. Don't let this happen to you—get after those poisonous fatigue acids that settle in your muscles after a strenuous workout—make them swell and ache. Absorbine Jr. is what you need. Accepted laboratory tests prove it speeds the blood through the muscles to flush out the fatigue acids. Works fast to help keep you in top form. Splash it on after every practice and game and 2 or 3 times a day. Great for the rubdown! Many coaches and trainers have recommended Absorbine Jr. for over 40 years. **FREE SAMPLE.** Write W. F. Young, Inc., 245 Lyman St., Springfield, Mass.

FAMOUS also for Athlete's Foot—Sprains—Bruises

**ABSORBINE JR.**

# Suggestions for Speed Skating

By **J. Fred Gohl**  
Director, Peirce Playground, Chicago

**I**CE skating is coming more and more into prominence as a winter sport. Ice carnivals and inter-club speed skating races have increased the demand for speed skating. Very few skaters have been coached in the skill of the sport. In the past it has been necessary for those interested to belong to clubs to receive instructions. Due to short seasons in some sections of the country there are no skating clubs, so this club-coaching method is not practical there. Many athletic coaches may feel the need for suggestions and material for coaching their best skaters in order to enter them in local as well as in state meets. Perhaps such coaches will find the following suggestions helpful.

Speed skaters must first learn to skate speed-style. This is acquired by the use of strokes with power and drive, by getting the most from every stroke, and by practicing starts and finishes. These three requirements are best developed by practicing them individually, then gradually putting them together during practice.

## Starting

1. Get as near the pole position as possible on the starting line. This prevents being crowded out on the first turn. Each skater should be an arm's length from his opponent.

2. Face the starter. Be alert and anxious to get started. Be expecting the gun before it bangs. If nervous on the start take two or three deep breaths. This tends to relax one and aids in clear thinking. If the track is short, hold your breath to the first turn to help create extra energy and concentration on the position desired.



The illustration above shows the correct starting position. The skater at the left is intent on watching the starter. His knees are well bent; his body is low; his arms are ready for action on the first step. The skater in the center illustrates the proper position of the feet, body, arms and head. His eyes are focused down the track. The skater at the right will get off to the slowest start. His left arm is too low; his left foot is turned in too far and his body is turned too much.

3. The first few steps should be short as in a dash. On the first step, cross the left foot over the right, allowing the heel of the skate to miss the toe of the right foot. The left foot strikes the ice on the front one-third of the skate blade. The right skate blade does likewise on the next step. If the skater is in the habit of starting off on his left foot, then the right foot is crossed over in the same manner as described above. Some skaters may be handicapped by standing sidewise to the line, because the starter is not in view. In this case, the skater should change his position and face the line with both feet and eliminate the leg or foot cross-over start. This start requires a little more of a crouch position.

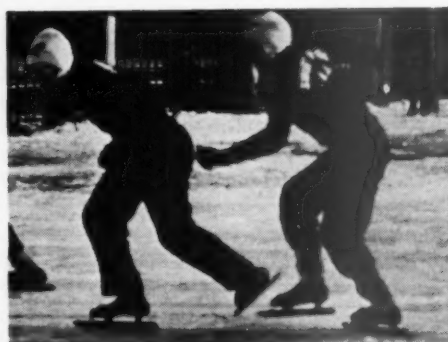
4. Run on the front one-third of skate blades until sufficient speed is attained to carry through long strokes. Be one of the first three to reach the first turn from the starting line.

## Skating

1. When pacing or setting the pace, rest the hands on the back. Reserve strength is needed for the finish. Use the hands and arms only on catching your balance or on sprints.

2. Skate with the body low, leaning forward, so that the strokes will push you forward. Keep the back nearly parallel to the ice and your eyes on the track ten to fifteen yards ahead. This prevents wind resistance.

3. Work the ankle with a snap as a pitcher does his wrist in pitching baseball. Take long strokes on the straightaway, using the full length of your leg. Ride the flat part of the skate-runner and not the sharp edge. The edge is for gripping and for starting each stroke.



A cross-over start. The skater at the left has crossed the right leg over the left and is starting to bring the left leg forward. The skater at the right is shown crossing the left foot with the right. His arms are bent and he is ready to swing into the short run.

4. The leading skater should not set the pace too fast unless he knows he can keep it up. If not setting the pace, the skater should stay second or third. Let the first skater break the wind.

5. Pass on the straightaway in a sprint. Never attempt to pass an opponent on a turn, if he holds the pole position. Always pace close to an opponent, until the sprint at the finish. Skaters holding the pole position throughout the race usually swing out on the far turn, as they approach the home stretch.

6. Never look back. Never coast. Keep stroking. If leading, keep your eyes on the track ahead and your ears alert for opponents. Never let your opponents gain too much distance, for in making this up, your reserve may be drawn upon too much.

7. Never give up or drop out. Even good skaters fall. Remember, if tired and short of wind, second wind will come, if you keep going. If you fall down, you should remember to start out the same as on the starting line and run until sufficient speed is gained to start stroking with force and power.

8. Wear clothing that allows for freedom of legs and arms. Avoid flapping trousers, jackets or shirts that cause wind resistance. A good comfortable cap is essential so that a skater will not have to make unnecessary movements in order to make adjustments. All unnecessary movements should be avoided.

### *The Finish*

1. Finish strong. Stay close to the pole position on turns. Use long powerful strides on the home stretch. In short races use the arms all the way.

2. When passing an opponent, break your rhythmic pacing stroke. This throws an opponent off stride.

3. Finish at top speed across the finish line. The last strokes should be made past the finish line. Spend all your reserve on the final sprint.

4. Your feet must cross the line first. Never dive across the finish line for this gives your opponent open opportunity to place his feet first across the line.



The illustration above shows an incorrect starting position. The skater at the left and the one in the center are not bent over enough and their feet are too far apart. The skater at the right may become off balance and will have difficulty in the short sprint as he leaves the starting line. His right arm is too low.

# Protection Without Interference

When your squad is equipped with Spalding gear, it's ready for action. This equipment was designed to give players maximum protection without hampering their freedom of movement. High grade materials and careful construction give it the long wearing qualities always associated with Spalding.



52-A-SC

### **This smart helmet is tops in safety!**

Air-Lite cushion rubber-padded. Aviator style with molded ear cups. Elastic straps to give a snug fit. Padded, adjustable chin strap. One-piece, ventilated leather crown. Made up in any combination of black and tan, all sizes.



141-SP

### **The modern favorite in shoulder pads!**

Air-cushioned (patented), rubber-padded, covered with airplane cloth. Leather-cup, leather-bound . . . reinforced with fibre and springs. Adjustable lacing and elastic body straps. Full shoulder protection is assured.



F-01

### **Shoes for Speed and Comfort!**

These medium-weight, football shoes are built on Spalding patterns, for backfield and line play. Genuine yellow-back kangaroo, Goodyear construction, with double web reinforcement. Spalding official SAFE-T-cleats as recommended by the Rules Committee. Sizes 6 to 12, C, D, and E widths.



10F.P.

### **These College Shell Pants combine freedom and safety!**

Made of 9 oz. tan army duck. Tunnel belt loops. Worked eyelets with leather frog inside and outside at bottom of fly. Set in crotch piece extending from fly up the back of seat. Leather frog in back at top of crotch piece. Thigh guard pocket with separate pocket for side swipe fibre. All knee reinforced on inside with white drill with knee pad of close quilted all kapok extending from bottom of thigh guard. Elastic across bottom of legs, cut-out in back of knee. Let-out seams back of legs.

Give your boys every playing advantage  
... outfit them with Spalding equipment.

*A.G. Spalding & Bros.*

ATHLETIC EQUIPMENT





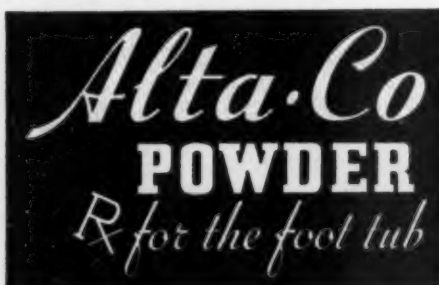
## Stable in Solution

**ATHLETE'S FOOT** control is more economical with the new fungicidal Alta-Co Powder because it is stable in solution. It does not break down in the presence of organic matter and light—need not be changed so frequently. Result: you save money in actual use.

Dissolved in water, 1 pound to 1 gallon, Alta-Co Powder kills Athlete's Foot fungi in less than 1 minute. This has been proved in tests on vigorous strains of *Trychophyton rosaceum*, *Epidermophyton interdigitale*, *Epidermophyton cruris*, *Achorion Schoenleinii* and other resistant fungi.

Yet, solutions of Alta-Co Powder are harmless to the skin—no more irritating than ordinary sea water. And harmless to towels.

Alta-Co Powder contains chemicals never before used for Athlete's Foot prophylaxis. A patent is pending. Report J-92 sent gratis to coaches.



**The C. B. DOLGE CO.**  
WESTPORT, CONN.

# The Functioning of an Athletic Officials' Association

Carl L. Nordly, Ph. D.

Assistant Professor of Physical Education, University of Minnesota

**T**HE Minneapolis Officials and Coaches Association has functioned for eighteen years. The purpose of the association as stated in the constitution, is "to foster a high standard of clean athletics through a close association of officials and coaches and a uniform interpretation of the rules of athletic contests."

Prior to the football and basketball seasons, the Secretary-Treasurer of the association, Ralph C. Tapp, Director of Physical Education in the Minneapolis Public Schools, mails a booklet to approximately one hundred fifty high schools and colleges. It contains (1) a list of the officials (forty-six in football and forty-four in basketball for the current year) with their home addresses, home and business telephone numbers; (2) the names of the officers and qualifying committee; (3) instructions for securing officials of the association; (4) the constitution, and (5) spaces for schedules.

Persons who desire the services of a member of the association are urged to correspond directly with the Secretary-Treasurer of the Association and to list several men in order of preference. This procedure is expeditious and economical since members of the association provide the Secretary-Treasurer with their officiating schedules.

The association, in an effort to achieve its purpose, holds weekly meetings during the football season. Absence from three successive meetings is deemed just cause for disqualification of members.

### Functions of the Association

The association also has functioned in the following ways:

1. Conducted football and basketball rules' interpretation meetings which are open to coaches, players, and spectators as well as to officials.

2. Sent interpretations of rules to officials, coaches, and sports writers throughout the state.

3. Participated in discussions of football and basketball rules on radio programs.

4. Sponsored demonstrations of basketball officiating.

During the current year the President, Weston W. Mitchell of Minneapolis Central High School, appointed program committees for football and basketball which assisted him in planning the meetings. Members of the association were

divided into groups, several of which were given the responsibility for leading discussions on a particular phase of the rules. One group was assigned to arrange a demonstration of officiating by all members of the association for the purpose of standardizing officiating techniques. Since this procedure is an innovation in so far as this association is concerned, the plan of administration will be explained.

The demonstration of officiating was held with the co-operation of Frank McCormick, Director of Athletics at the University of Minnesota. The association was extended the use of Cooke Hall which includes the facilities for four basketball courts on one floor. Freshmen basketball players formed eight teams.

Several days before the demonstration an instruction sheet was sent to all members of the association. This included an announcement of the place and time of the meeting and showed the court assignment and quarters of games, during which each official was to officiate, so as to rate two other officials, to time or score.

### Rating Sheet

The following rating sheet, slightly modified in the light of a discussion at a subsequent meeting, was used:

Name of official.....	
Officiating capacity:	
Referee..... Umpire.....	
1. Was the official tardy?	Yes..... No.....
2. Was the official dressed neatly?	Yes..... No.....
3. Did the official lack knowledge of the rules?	Yes..... No.....
4. Did participants disapprove of rules interpretations?	Yes..... No.....
5. If your answer to 4 was "Yes," was such disapproval justified?	Yes..... No.....
6. Did participants disapprove of official's judgment?	Yes..... No.....
7. If your answer to 6 was "Yes," was such disapproval justified?	Yes..... No.....
8. If your answer to 4 or 6 was "Yes," did the official handle the situation tactfully?	Yes..... No.....
9. Did the official call fouls consistently?	Yes..... No.....



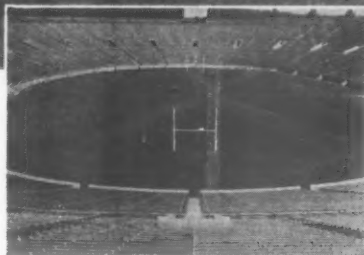
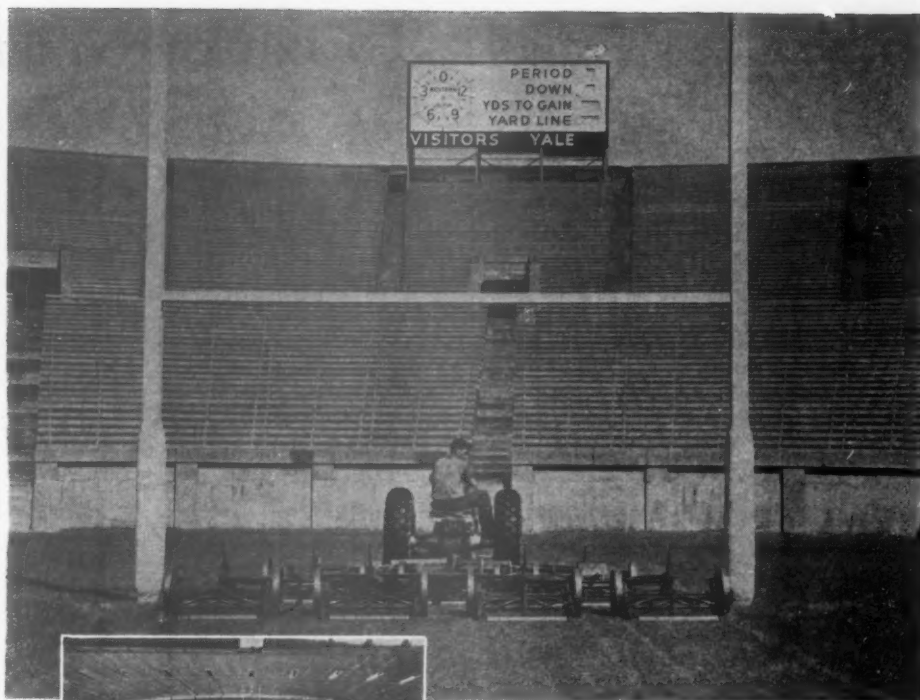
10. Did the official call (check)
  - Too many fouls .....
  - Not enough fouls .....
  - About the right number .....
11. Did the official call held balls (check)
  - Too soon .....
  - Not soon enough .....
  - About the right time .....
12. Was the official's judgment on traveling (check)
  - Too lax .....
  - Too strict .....
  - About right .....
13. Did the official throw the ball during jump balls (check)
  - Too high .....
  - Not high enough .....
  - About right height .....
14. Were out-of-bounds decisions made distinctly? Yes..... No.....
15. Did the scorers experience difficulty in learning who committed fouls? Yes..... No.....
16. State frankly your suggestions to the official for his improvement.
  - .....
  - .....
  - .....
  - .....
17. Rate the official to the best of your ability (check)
  - Excellent .....
  - Good .....
  - Fair .....
  - Poor .....

At the next meeting a summary of the rating sheets was presented and they were handed to the officials. There was no open criticism of any official during the meeting. The only persons who knew how a particular individual was rated was the official himself, the individual who rated him, and a secretary who tabulated the results.

#### *Suggestions for Improvement*

The plan, outlined above, for demonstrating officiating and rating officials was well received by those who participated. Suggestions which have been made for improvement of procedures next year include the following:

1. Members of the association should co-operate in notifying the secretary-treasurer of inability to attend, so that there will be no alterations in the assignments.
2. Two or more such meetings should be held so that officials may demonstrate their abilities for a longer period of time.
3. Officials should not know who are rating them.
4. Five or more ratings should be made for each official. Although the human equation will enter here, as it does in officiating, the rating technique might be improved by preliminary ratings and discussions of them by the group.



*Worthington Tractor and 7-Gang Mower keeps the turf of Yale Bowl in perfect shape*

## **WORTHINGTON EQUIPMENT**

### *helps to give you better playing fields*

Worthington mowing equipment is designed to give you better turf at lower costs. One man with the Worthington Tractor and 7-Gang Mower can cut 75 acres a day, which means playable surfaces at all times on football, soccer, polo, baseball and practice fields. This same equipment is readily adaptable to general upkeep of campuses and grounds, though many universities, colleges and schools prefer the Worthington Parkover for other than athletic field use.

The tractor is also used to haul ice-scrapers for hockey rinks, rollers for tennis courts and tracks. This is the identical equipment which thousands of golf courses, parks and municipal recreation centers use to keep their turf in shape, as well as such institutions as Yale, Cornell, University of California,

Northwestern and many prominent preparatory schools and seminaries from coast to coast.

The sickle bar attachment cuts your long grass, hay or weeds and the power take-off enables you to run pumps, sprayers, saws, compost mixers, etc.—saving you the expense of much extra equipment—while the easily attached snow plow will keep your walks and drives clear all winter.

It will pay you to investigate the advantages of Worthington equipment before your upkeep problem becomes acute with the beginning of the outdoor playing season.

There are more Worthington Gang Mowers in use throughout the world than all other makes combined.

*Tear out this coupon for handsome illustrated catalogue showing Worthington equipment that will save you money and time and give you man-power for other necessary and important work.*

**Worthington**  
**Mower**  
*company*

Main Office: Stroudsburg, Pa.  
Sales Agencies: All Principal Cities

**WORTHINGTON MOWER CO.**  
Stroudsburg, Pa., Dept. AJ/F

*Please send catalogue on your equipment at no obligation.*

NAME.....

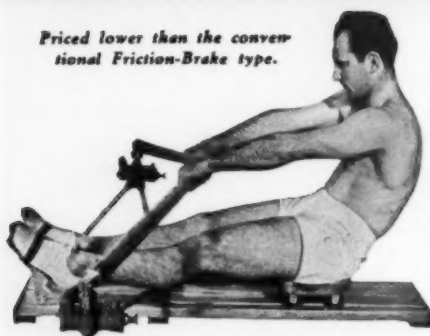
ADDRESS.....

CITY.....STATE.....

*And Now!*

A POPULAR - PRICED  
Hydraulic ROWING  
MACHINE by-  
**MEDART**

Priced lower than the conventional Friction-Brake type.



Approximately 66% lower price. Now within the reach of every gym. Manufactured and guaranteed by "Medart" the oldest manufacturer of Gymnasium Apparatus, Basketball Backstops, Telescopic Gym Seats, Lockers, Lockerobes, Playground and Pool Equipment.

Write for complete details

FRED MEDART MFG. CO.  
3542 DeKalb St., St. Louis, Mo.

**GYM MATS**  
and Wrestling Mats



Hair Felt

Hand Tufted

Boxed Edges

Heavy 21-oz. White Duck

Handles that will not come off

write

**National Sports Equipment Co.**

360 MARQUETTE ST. FOND DU LAC, WIS.

# To Eat or Not to Eat Breakfast

By Jack Matthews

University of Missouri

**M**ANY coaches have wondered from time to time whether or not it is advisable to allow competitors, especially distance men who may have to run as early as ten o'clock, to eat breakfast on the morning of a race.

For the past three years, beginning in 1936, the Big Six Conference Two-Mile Championship Team Race has been scheduled for ten o'clock in the morning. The meet in 1936 was held in Manhattan, Kansas. En route to Manhattan on the train the night before the meet, I was confronted with the problem of deciding whether it would be advisable for the members of the team to eat breakfast. My decision was that it would be wiser to eat a substantial supper and do without the morning meal. I felt that my decision was contrary to common practice, so I was considerably worried during the course of the race concerning my decision. After the race was over it was found that four of the runners had bettered not only their best previous performance but had also turned in the best times of their careers as two milers. The mean improvement in times was 4.4 seconds (Table I).

Another opportunity to check the no-breakfast idea did not present itself until a year later in November, 1937, the time of the next Big Six Conference Two-Mile Championship Team Race held in Columbia, Missouri. This presented a slightly different situation, in that the boys were not traveling but were competing in their home school community. Again the Missouri runners competed without breakfast. In this race with the temperature at 16 degrees above zero and snow banked around the track, four of the runners again ran not only their fastest race of the year but also their fastest race in college competition. The mean improvement was four seconds (Table II).

During the season of 1938 two meets were held in which the no-breakfast plan was again checked. At mid-season, on October 29, a dual two-mile team race was run with the University of Nebraska at Lincoln. This was somewhat different from the previous races in that on the two previous occasions the meet was a conference meet and the last meet of the season. In the Nebraska race, all five of the Missouri men turned in their best

TABLE I

Best Previous Race	Big Six Meet 1936	Improvement
Kirkman ..... 10:09	10:05	4 seconds
Burrus ..... 10:06	10:21	—15 seconds (had not run in two previous meets because of an injured foot)
Collins ..... 10:10	10:05	5 seconds
Rucker ..... 10:18	10:07	11 seconds
Friesz ..... 10:34	10:17	17 seconds

TABLE II

	Best Previous Race	Bix Six Meet, 1937	Improvement
Munski .....	9:50	9:44	6.0 seconds
Collins .....	10:03	9:49.5	13.5 seconds
Rucker .....	10:08	10:15	—7.0 seconds
Whaley .....	10:17.5	10:17	.5 second
Friesz .....	10:16.5	10:09	7.5 seconds

TABLE III

	Best Previous Race	Nebraska Dual Meet	Improvement
Munski .....	9:35	9:29.7	6 seconds
Reeves .....	10:18	10:13	5 seconds
Rucker .....	10:26	10:14	12 seconds
Brown .....	10:29	10:25	4 seconds
Fischer .....	10:23	10:22	1 second

TABLE IV

	Best Previous Time	Big Six Meet, 1938	Improvement
Munski .....	9:29.7	9:17.5	12 seconds
Reeves .....	10:13	10:01	12 seconds
Brown .....	10:25	10:12	13 seconds
Rucker .....	10:14	10:15	—1 second
Fischer .....	10:22	10:33	—11 seconds

race of the year and three of the men made the best time of their experience as two milers. In this race the men showed a mean improvement of 5.6 seconds (Refer to Table III).

Three weeks later, on November 19, 1938, with no intervening competition, the Big Six Conference Two-Mile Meet was again held in Columbia at ten o'clock. No breakfast was eaten by the Missouri contestants. Three of the runners ran faster than they had ever run. The mean improvement was 5 seconds (Refer to Table IV).

It will be noticed that in all of the situations, listed above, the data are concerned with individuals who always competed without eating breakfast when running a morning race. It might be argued that, if the runners had eaten breakfast, they might have shown greater improvement.

The problem then was to find a group of runners that competed in the same event on the same day and did so after eating a meal before running. Such a group was found in the X College two-mile team. The second part of this paper will be devoted to a comparison of the records of the two teams, one competing with breakfast, the other without breakfast before morning races.

It is necessary to explain at this point, that X College competed in the same conference as the University of Missouri. Also the letters A, B, C, D, E, F, and G have been used in place of the names of the runners of the X two-mile team. The comparisons which follow would not have been possible if the coach of X College had not furnished the data concerning his team and also granted permission for its use in this article.

Since Missouri and X College met in an early season dual meet, with both teams having one previous meet, and both teams alike in personnel in that one runner was quite superior to the remaining members of the team, the two teams presented adequate data for study.

Missouri and X College met in a dual meet on October 15. The race was scheduled and run at 1:40 P.M. All men competing ate at least one meal before running. The times of the team runners are shown in Table V. The range of times of the Missouri runners was from 10:04 to 11:33 or 89 seconds. The range of the X College times was from 10:08 to 11:20 or 72 seconds. The mean time of the Missouri runners was 10:43.8 while the mean time of the X College runners was 10:52.4.

The Big Six Two-Mile Meet was scheduled and run at 10 A.M. on November 19, five weeks after the above-mentioned dual meet. Before this race, none of the Missouri runners were allowed to eat breakfast while the X College runners breakfasted at 7:30 A.M. In this race all of the runners representing each school im-



## FLIGHT CONTROL

The famous A. J. Reach, Wright & Ditson STA-TRU "Last-Bilt" balls have CHANNEL SEAMS giving new speed and brilliance to these leading products.

CHANNEL SEAMS function similarly to the dimples on a golf ball—they force the ball to bore through the air instead of floating, to hold on a true course without swerving or dipping. A molded, under-surface part of the "Last-Bilt" body, they can never wear smooth, so act as permanent guardians of flight.

STA-TRU "Last-Bilt" balls are constructed layer by layer on a molded last to make a perfect sphere, with all stitching eliminated. The perfect uniformity of weight, size and shape is never lost.

Whether your game is basketball, soccer or volleyball, your team will want an A. J. Reach, Wright & Ditson STA-TRU, "Last-Bilt" ball with the new CHANNEL SEAMS.

And you'll find the "Last-Bilt" balls outwear ordinary balls three to one!

**A. J. REACH, WRIGHT & DITSON**  
ATHLETIC EQUIPMENT



# TWO THINGS

## MAKE A GREAT HITTER

In view of the fact that by far the greatest number of Baseball's outstanding sluggers have depended upon one make of bat for more than half a century—it's no secret that a hitter's success depends in a great measure on

### THE BAT HE USES

Likewise—it's no secret that proper coaching on how to stand—how to hold a bat and other pointers on good batting technique determines his success to an even greater degree—so we say again two things make a great hitter—the bat he uses—and—

### THE WAY HE USES IT . . .

*Autographed*



ALSO MAKERS OF LOUISVILLE GRAND SLAM GOLF CLUBS

proved their times over the dual meet times. The mean improvement of the four Missouri runners was 38.5 seconds. The mean improvement of the three X College runners was 24.3 seconds. It will be noted that one of the Missouri men and two of the X College runners who ran in the dual meet did not represent their schools in the conference meet. However, the range in times of those who did compete was 75.5 seconds for the four Missouri runners and 27 seconds for the three X College men. The mean time for Missouri was 10:00, and for X College 10:12.6.

Two weeks after the X College dual meet, Missouri ran the University of Nebraska at Lincoln at 10 A.M. The Missouri runners did not eat breakfast before this race. Table VI shows the improvement of the Missouri runners over their times of the X College meet.

The range of the times of the Missouri runners was 55.3 seconds, and the mean time was 10:08.7 seconds. This made a mean improvement of 34.5 seconds.

Four weeks after the X College dual meet with Missouri, the X College team met Kansas State at Manhattan, Kansas, in a dual meet. The race was run at 11

A.M. and the X College runners ate breakfast at 7:30 A.M. A comparison of the times made in this meet and the Missouri-X College dual meet are shown in Table VII.

The range of times of the X College runners was 49 seconds and the mean time was 10:49.7 with a mean improvement of 0. The mean improvement over the Missouri dual meet times was exactly 0 seconds, as compared with the 34.5 seconds mean improvement that the Missouri team made in their meet with Nebraska.

The results of this study raise several questions in the mind of the writer. First, if the results of the study made are not convincing as to the eating of breakfast before running morning races, more studies should be devoted to this subject. Second, if the race is to be run in the afternoon, would it be better to have breakfast early, with no intervening meal? The present practice usually dictates a meal before an afternoon meet. Third, if the meet is a night meet, perhaps better results would be obtained if only a noon meal is given. Fourth, the whole subject of diets and hours of eating for athletes needs more study and research.

TABLE V

Missouri-X College Dual Two-Mile Team Race October 15, 1938 Run at 1:40 P.M.		Big Six Conference Two-Mile Team Race November 19, 1938 Run at 10 A.M.	
Missouri Runners and Times			Improvement
Munski .....	10:04	9:17.5	46.5 seconds
Reeves .....	10:28	10:01	27.0 seconds
Rucker .....	10:36	10:15	21.0 seconds
Friesz .....	10:58	(Did not compete)	
Fischer .....	11:33	10:33	60.0 seconds
		Average improvement .....	38.5 seconds
X College Runners and Times			
Runner A .....	10:08	9:56	12 seconds
Runner B .....	10:53	10:22	31 seconds
Runner C .....	10:53	10:23	30 seconds
Runner D .....	10:58	(Did not compete)	
Runner E .....	11:20	(Did not compete)	
		Average improvement .....	24.3 seconds

TABLE VI

Missouri Runners	X Dual Meet	Nebraska Dual Meet	Improvement
Munski .....	10:04	9:29.7	34 seconds
Reeves .....	10:28	10:13	11 seconds
Rucker .....	10:36	10:14	22 seconds
Fischer .....	11:33	10:22	71 seconds
Brown .....	(Did not run)	10:25	—

TABLE VII

X Runners	Missouri Dual October 15	Kansas State Dual November 12	Improvement
Runner A .....	10:08	9:56	12 seconds
Runner B .....	10:53	10:58	—5 seconds
Runner C .....	10:53	11:00	—7 seconds
Runner D .....	10:58	....	....
Runner E .....	11:20	....	....
Runner F .....	....	10:40	....
Runner G .....	....	10:45	....

## Are Sports Worth Their Cost?

By Mark MacIntosh

Swarthmore College

SINCE Swarthmore's President Aydelotte spoke at the National Collegiate Athletic Association in New Orleans in 1937, many educators have expressed the desire to know more about our physical education and athletic program. The following is a brief outline of what we do, our facilities in the way of buildings, grounds, and staff, and the money we spend.

First, do we approach the ideals expressed in our president's speech, and second, is the athletic or educational job that we are doing worth what it costs?

Dr. Aydelotte said, "There is a solution of the whole athletic problem. It is not the tame policy of abolition of inter-collegiate athletics which takes the heart out of games and tends to do away with discipline and training. It is not a policy of restriction of any sort; it is instead, a cure for the evils of athletics by providing more opportunities for athletic sports maintained for the sake of the students rather than the policy of recruiting students for the sake of the athletic teams. It is a policy of athletics for all, wisely arranged so that every individual shall have his chance."

### Program

We call our activities "sports education" because that title describes exactly what our program is. Our catalog requirement in sports education is as follows: Unless excused by college physician, all freshmen and sophomore men must participate a minimum of two days per week in some sport on our program. Evidence that we enforce this is indicated by the fact that in June, 1937, three men were not allowed to graduate with their class because of a deficiency in this requirement.

Students may satisfy this requirement by participation in any of three divisions of our program, i.e., inter-collegiate, intramural, or required. By required I mean those sports like touch football which are organized to take care of the men not in the other two divisions. Juniors and seniors may elect to participate in any part of the program. Freshmen and sophomores are given marks solely on the basis of amount of participation, that is A for an average of five days a week, B for four days a week, etc.

Here are some figures taken from our attendance records for last year's participation. They show the median weekly attendance. Of our 700 students, 350 are men.



If the athlete sustains  
**Damaged Ligaments or Tendons**  
or is incapacitated with a  
**Tenosynovitis**

the symptoms of pain, inflammation and swelling may be much relieved with comfortably hot applications of

## Antiphlogistine

**N. B.** Never apply Antiphlogistine as if it were an ointment. For best results apply it comfortably hot to the depth of about  $\frac{1}{2}$  inch.

Free sample to coaches, trainers and athletic directors

**The Denver Chemical Mfg. Co.**

167 Varick St., New York

## The Tetra Bandage

ELASTIC WITHOUT RUBBER

350 NORTH CLARK STREET

CHICAGO, ILLINOIS

*The Choice of Fencing Champions and Coaches:*

## VINCE FENCING EQUIPMENT

A new completely illustrated 16 page catalog describing the finest in American made, as well as imported articles is now ready. Send for YOUR copy today. Outfit your fencing group at the lowest cost.

**VINCE FENCING EQUIPMENT**

202 E. 44th Street, NEW YORK CITY

## MEDART Telescopic GYM SEATS



Safe to use and safe to operate . . . Employs the modern telescopic principle of operation . . . Occupies minimum floor area when "nested" thus freeing valuable floor space for class use . . . Easily installed in existing buildings as well as in new gymnasiums . . . One hundred per cent "Medart" built by the oldest manufacturer of gymnasium apparatus, basketball backstops, lockers, lockerobes, playground apparatus, and pool equipment.

Write for Catalog GS-2

**FRED MEDART MANUFACTURING CO.**  
3542 DEKALB ST. . . . . ST. LOUIS, MO.

## YOU'LL NEVER FIND A NEEDLE IN GYM MATS FILLED with

# OZITE

PLATEN PROCESS ALL-HAIR

## GYMNASIUM MAT FELT

• Made entirely of selected cattle hair which has been thoroughly cleaned and sterilized. Stays resilient, springy and free from lumps.

Every Athletic Director knows the danger of injury from broken needles in gym mats—that's why it's so important that you know what filling is used in the mats you buy. Always specify OZITE Gym Mat Felt, because there are no needles used in the OZITE PLATEN PROCESS of felting and the felt stays soft and springy much longer—seldom needs replacement. Write for samples and complete information.

**AMERICAN HAIR & FELT COMPANY**  
Merchandise Mart, Chicago

• For safety and comfort  
**INSIST** on mats filled  
with genuine OZITE Felt!

The waffle design and the OZITE label on the cover protect you against substitution.

## Median weekly attendance in sports 1937-38

### Fall

Football (varsity and freshmen) . . .	64 different men
Touch Football (required, intramural)	51 " "
Soccer (4 intercollegiate squads) . .	93 " "
Cross Country (varsity & freshmen)	25 " "
Tennis (required and intramural)	42 " "
Swimming (required & intramural)	21 " "

296

### Winter

Basketball (varsity, J. V. and freshmen) . . . . .	44 different men
Basketball (required & intramural)	28 " "
Swimming (varsity, frosh, required)	44 " "
*Tennis (winter and required)	41 " "
Fencing (required)	27 " "
Boxing and Wrestling (required)	16 " "
Badminton, Handball, Squash (required)	12 " "
Lacrosse (pre-season)	45 " "
*Soccer (winter)	22 " "
Baseball (pre-season)	23 " "
*Track (winter and intramural)	41 " "

343

### Spring

Baseball (varsity and freshmen) . . .	35 different men
Softball (required and intramural)	44 " "
Lacrosse (varsity, JV, freshmen)	48 " "
Swimming (required)	15 " "
Tennis (varsity and freshmen)	16 " "
Tennis (required)	48 " "
Track (varsity and freshmen)	43 " "
Golf (varsity and freshmen)	15 " "
Golf (required)	32 " "

296

\*Winter track, tennis, and soccer squads have intercollegiate schedules.

Sixty-seven per cent of our male enrollment took part in intercollegiate sports last year, and 95 per cent were in some division of sports. I do not know how those percentages compare with other small colleges. As for large universities, I read in a recent Athletic Journal that the University of Minnesota had 14 per cent in intercollegiate sports and 50 per cent in all forms of sport. I suspect that both Minnesota's and our participation percentages are higher than the averages for these two types of institutions. We have fourteen intercollegiate sports, which is a comparatively large number for a college with 350 men and a freshman rule. Mr. DeGroat of Springfield College found in one of his many researches that colleges with 400 to 750 men had an average of seven intercollegiate sports.

### Facilities

For our 350 men we have two ordinary size gymnasiums, one large field house 100 yards long by 40 yards wide, seven clay tennis courts, two football fields, two touch football fields, two soccer fields which become lacrosse fields in the spring, one baseball diamond, one outdoor cinder track, and some extra available flat turfed area for softball games.

Our staff includes four full-time men and eight part-time men who coach sports and administer the program; one part time physician who gives all men medical examinations on entering college and at the beginning of each of the sport seasons, besides teaching hygiene and maintaining office hours one hour a day in the late



afternoon in one of the gymnasiums; and three men who are part-time trainers, equipment men, and janitors. Care of all outside playing areas is provided by the superintendent of grounds.

The only comparison I could find to make with our twelve-man coaching staff was in a recent research made by Harry Van Velsor of Rensselaer Polytechnic Institute, who found that in eighteen Eastern colleges with an average male enrollment of 664 students there was an average of 7.7 men on the instructional staff.

#### Costs

The costs of our program are as follows:

Salaries for instruction and administration .....	\$17,000
Schedules, equipment, etc.....	18,900
	<hr/> \$35,900

Here is where the money comes from:	
Gate (football \$1,000, basketball \$1,000) .....	\$ 2,000
Student Athletic Fees.....	6,700
General College Budget.....	27,200
	<hr/> \$35,900

These figures do not contain the cost of heat, light, and janitor service in athletic buildings, or general care of playing areas, which items would undoubtedly run into several more thousands of dollars per year. Leaving out these items, and taking only the known costs, I find that for our sports' education program we spend per capita for our 350 men students a little over \$100.00 per year, of which the general college budget pays for \$78.00 and student fees and gate \$25.00.

From our comptroller's office, I found that, for last year, exclusive of the costs of administration, buildings, and grounds, dining rooms and dormitories, the total costs for all academic departments divided on a per capita basis came to \$480.00 per student. This means, if you still want to follow me through this maze of statistics, that our administration appropriates to the men's athletic department 16 per cent of the amount appropriated to all academic departments.

#### Is It Worth It?

Without having comparative data from other colleges, I suspect that Swarthmore would be classed in the upper bracket of colleges which spend freely for sports. The natural questions arise here. Are sports worth what we spend on them? Are they worth their cost?

Our administration thinks so, for there has been no curtailment of our program this year, but rather an expansion, in that we have added fencing as an intercollegiate sport, and have increased the number of our intercollegiate basketball squads from three to four.

IN KEEPING WITH  
DIGNITY AND TRADITION



O'Shea

## AWARD SWEATERS

O'Shea award sweaters embody quality, style and distinction which lives up to the traditions of American sport. Next to the honor of receiving his letter, the athletic star prizes the distinguished garment which carries it, for he knows it will last as long as the memory of his achievements.

The new O'Shea award sweaters for 1939 excel even their previous high standards. O'Shea hydrotoning brings new life and longer wear to the fine wools of which they are knitted. Style and fit are assured by the most careful workmanship.

Specify O'Shea award sweaters this year and you will earn the undying gratitude of your letter men. Just ask the coach who gave them last year—and the years before.

**O'SHEA KNITTING MILLS**  
2701 N. PULASKI ROAD CHICAGO, ILL.

# BASEBALL COACHING KIT

18 Booklets—\$1.65

Coach's Instructions to—

Batterymen	3rd Basemen
1st Basemen	Shortstops
2nd Basemen	Outfielders

2 copies of each of above plus

1. Organizing the Pitcher's Thinking.
2. Practice Work with Pitchers.
3. Qualifications of Baseball Players.
4. Extra Dividends in the Batting Order.
5. Practice Session Talks.
6. Signal System for the Coach.

Extra Booklets 10c each—Renew your kit.

## Also Available—

Baseball Coach's Data Sheets—1½c each. Let these sheets tell who is best lead-off hitter—who hits with men on base, who is driving in runs—who has the best pitching record. Up-to-the-minute facts about your squad.

A Study Pertaining to the Athletic Directorship of Intercollegiate Athletics—22 pages—25c.

## Baseball Instruction Course Outline—\$1.00

## Favorable Comments—

"Organizing the Pitcher's Thinking"—"is one of the best articles for young pitchers that I have read and we want our boys to have the opportunity to read it several times."

COACH DAVID R. PARKS,  
Columbus, O.

"Your Baseball material has been a great help to me (an old coach)—on account of the graphic presentation and as a text book for my intramural as well as varsity groups."

JIM KENDRIGAN,  
Univ. of Habana.

Order from  
**H. S. DeGROAT, Baseball Coach**  
B. Dept., Springfield College,  
Springfield, Mass.

Just about every other college president in the land has sometime or other waxed warm in public utterances about the high educational value of athletics. Only those presidents mean it who practice in their

budgets what they preach in their talks.

It seems to me that in a nation's philosophy of physical education is tied up one of the greatest secrets of that nation's peace, happiness, and freedom.

# Racing Turns

By Russell Lindberg

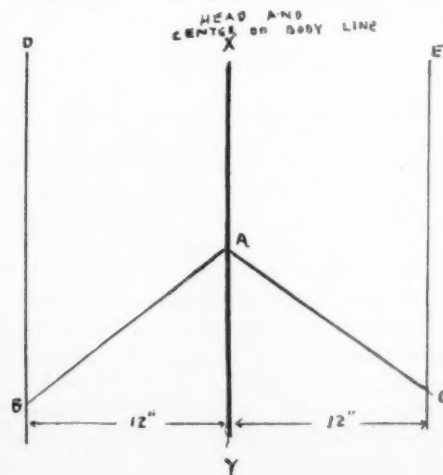
THE training for turns is a more stringent routine than the swimmer's practice for endurance. In practice, the swimmer is apt to acquire many bad habits unless he is under the constant surveillance of a coach. The perfection of fast turns is a gradual process and the swimmer must understand that he is to train coordinating the fundamental movements until he acquires the proper rhythm and timing. It is only after the swimmer perfects the simple basic movements that he is permitted to speed-up the timing of the turns. When the coach believes that the swimmer is sufficiently skilled in executing turns on dry land, he then allows the swimmer to incorporate the practice of turns into the daily swimming routine. The most difficult phase of coaching a swimmer on turns is the effort spent convincing the swimmer to stress every turn as though he were competing in a race. If the swimmer is taught and stresses the frequent repetition of fast turns, he will soon perform the movements unconsciously. The inculcation of the fast turn movements should be the goal of every swimmer.

A racing turn is a series of rapid movements that must be performed as one unit. Any interruption of the timing disorganizes the entire turn. The train of movements commences when the swimmer approaches the 5-yard marker and ends when the swimmer passes the same mark on the way back. A swimmer is never permitted to coast into a wall or rest on the spin or turn. A good coach requires his swimmers to sprint the last five yards into the wall, for it is the rhythm and power of this approach that gives impetus to the spin and tuck, providing the touch hand does not obstruct the strain of movements. A slow approach always produces a slow turn. A swimmer ought to be able to negotiate a left or right-hand turn. The turn is named after the hand that first touches the wall. Many swimmers lose time on turns simply because of their inability to judge the number of strokes that they require, in order to reach the wall. Every swimmer ought to know which hand is going to touch first from any distance within the five-yard marker. A perfect turn is performed in three even counts: first, the touch; second, the spin and tuck; and third, the push-off. When the swimmer desires to speed up the turn he speeds up the rhythm of the timing. The under water turn is the only turn

that can be performed in rapid, even counts without the body being jerked out of position.

I first like to teach a swimmer how to execute a perfect turn on dry land. Of the series of turn movements only the approach and push-off cannot be taught on land. I teach a swimmer how to turn by means of the following diagram. I make a chart of three vertical parallel lines OB, XY and EC and two 45° angles BAY and CAY. The chart is painted low on the wall so that point A corresponds with the shoulder level when the body is bent at the hips. The body position is similar to the actual swimming position.

I require the swimmer to walk into the wall imitating his swimming. On a right-hand turn, the swimmer touches the wall at point A with the fingers of his right hand pointing toward B. The body is in a horizontal position and the shoulders are parallel to the wall. The head is in the inhale position with the chin close to the shoulder. The swimmer slides his right hand down along the line AB until the elbow is at point A. (Note) At this point the head and shoulders are still in the same position as when the hand touched. This position is very important for it is the key to the entire turn. The swimmer will notice a pull on his right shoulder. This is the cue for the swimmer to tuck his one knee under his body and spin the head and shoulders around. After the spin and tuck the head is in the exhale position (face down), and the shoulders are parallel to the opposite end of the pool. The right hand is now close to the hips and against the wall as the left arm is extended forward. The right foot ought to be about one foot directly



below the hips and hand. After the swimmer acquires the fundamental skills of the spin and tuck he is now ready to incorporate the movements of the push-off. As soon as the swimmer tucks his right knee under his body and spins, the right foot ought to be planted on the wall ready for the leg drive. As the body completes the spin, the right hand shoots forward as the legs push the body away from the wall. The coach should drill the swimmer on the series of movements of the land turns until he is convinced that the swimmer can perform a similar turn in the water. An identical turning chart in the water will be a great help to swimmers.

Many swimmers cannot perform fast turns when they compete in races. I have seen swimmers lose a race, because they could not execute a simple turn when the competition was close. A bad turn in a race can discourage any swimmer, especially when his rivals are of equal ability. Most of the bad turns that the swimmers perform can be eliminated if the coach would spend more time teaching and stressing the importance of turns.

At any swimming meet, many types of bad turns may be seen. The variety of faults are numerous for the errors produce more faults as the succeeding stages of the turn are performed. The faults appear on the approach, the touch, the spin, the tuck and on the push-off.

The elimination of the faults in the approach is most important for it is the approach that governs the speed, timing and the remaining series of movements. Some swimmers coast into the wall to be certain which hand is going to touch first. This slowing down eliminates the speed and momentum for the spin. As the result, the swimmer has to provide the speed by pushing the body away from the wall with his hand or jerk the body around by the force of the head and shoulder spin. Both of these compensatory movements cause the feet to be too far from the wall to give any real drive in the push-off. The swimmer's approach is similar to a running broad jumper's take-off. The broad jumper measures the distance from the take-off board to the starting position, so that he can run the distance at full speed and still take-off with the proper foot. The swimmer ought to be able to judge which way he is going to turn from any distance within the five-yard marker. Many swimmers misunderstand the meaning of speed when they approach the wall. The swimmer's speed on the approach for a turn ought to be faster than the swimming pace. I have seen swimmers think that they were increasing their paces by slapping the water fast and furiously when they were only hindering their progress. Another faulty approach that can be classified under the title of poor judgment is that of the swimmer ramming his head against the wall and attempting to climb up over the wall in his effort to make a

ATHLETIC COACHES AGREE

## The New VASSAR SWIM TRUNKS

HAVE EVERYTHING



● Young men on the team and in the stands have a lot of respect for what their coach says . . . and he agrees that here, at last, is the *one* Swim Trunk with *all* the answers. Vassars are built to emphasize athletic appearance and *freedom*, fashioned to fit with plenty of "hold" and all-over support. No binding, chafing, slipping, crawling or readjusting *anywhere!* There's no bulky belt or supporter . . . and you don't need either one of them! It's like "swimming in nothing at all" . . . just day-long ease and comfort. And Vassars are equally favored for wrestling, rowing, squash, handball and other vigorous sports.

Conservative or high-luster colors in your choice of two fabric combinations: rayon and "Lastex" with soft lisle inside . . . or mercerized yarn and "Lastex" with fine wool inside.

Write for descriptive folder

\$3<sup>95</sup>



\$2<sup>95</sup>

VASSAR COMPANY, 2509 Diversey Parkway, Chicago, Illinois





# SAND KNIT

## AWARD SWEATERS

*for Varsity Wear  
Service Stripes and Chenille Letters*

---

## FOOTBALL

*Jerseys—Football Pants—Hose*

---

## BASKETBALL

*Shirts—Pants—Warm-Ups*

### SAND KNITTING MILLS CO.

Manufacturers of Exclusive Knit Goods and Clothing for Athletic Wear

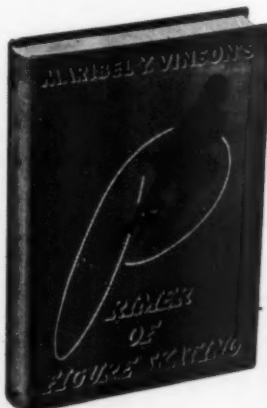
1714-20 N. DAMEN AVE.
CHICAGO, ILLINOIS

## CORRECTION

The price of  
*Maribel Y. Vinson's*  
**Primer of  
Figure Skating**  
is \$2.75

instead of \$3.00 as appeared in our January advertisement.

A complete elementary "course" carrying you through the first three official tests of the U. S. Figure Skating Association.



Send for a copy on approval

McGRAW-HILL  
BOOK COMPANY, Inc.  
330 West 42nd St., New York, N. Y.



**GRECO  
EQUIPMENT**

The equipment with a tradition. Five Centuries of Fencing Mastery Behind Each Article.

Write for Illustrated Catalogue A

19 W. 34th St.—GRECO—New York City



**GYM MATS**

WRITE FOR CATALOGUE

PETERSEN & CO.

5559 Baynton St., Philadelphia, Pa.

**BASKETBALL MANUAL**

**Price 35 Cents**

Administration Bldg.  
Washington Park, CHICAGO

turn. In sharp contrast to that is the fault of the swimmer anticipating a turn too soon. The swimmer imagines that he is nearing the wall and attempts to make a turn. As a result, only the swimmer's feet touch the wall and he needs to return and touch it with his hands to make a legal turn.

The touch, spin and tuck are synchronized in such a manner as to permit the touch hand to give the direction and the cue for the spin and tuck. The end movements of the spin and tuck and the starting movements for the push-off overlap so much that it is almost impossible to distinguish where one ends and the other begins. A faulty touch always interrupts the force that connects the approach with the spin and tuck. Bad turns, as a result of faulty touches, are recognized by the position of the touch hand on the wall. The most common fault is the over-reaching of the center line with the shoulders. A turn of this type is called a broad-side turn and it is impossible for the swimmer to complete the spin. The touch fault, that in which the swimmer stops the force of the forward drive by absorbing the shock with the touch hand is utilized in the out-of-water turns. A fault of this type requires that either the head and shoulders or the hand push-off to supply the force needed on a spin.

The spin is the follow-through movement of the approach. The faults on the spin are usually caused by an improper position of the head before the spin. On all spins, the head commences its spin from the inhale position with the chin close to the shoulders. From this position the head is spun around, forward and down along with the spin of the shoulders. On the spin the body is a rounded compact ball.

The tuck for the turn is performed while the body is in a position, horizontal to the water level and it is simultaneous with the spin. On approaching a wall, a swimmer will drop one shoulder, trying to complete the touch and spin from a vertical position. This fault causes the swimmer to draw his entire body around laterally and produce a broadside turn. On a proper tuck the knees are tucked up under the body before the spin of the head and shoulders swings the body into position. The importance of a horizontal tuck can be noticed by the speed in the push-off from the wall. On the horizontal tuck the feet are placed directly on the wall as a result of the spin and all the swimmer has to do is drive away from the wall.

The push-off is a continuation of the spin and tuck without any loss of time between the movements. It is usually between the tuck and push-off that most swimmers take a breathing spell. This is the time, when the swimmer should take advantage of his opponent's weakness. The loss of time on the push-off can be accredited to an improper tuck. If a

swimmer requires a double kick to get his feet on the wall and push away from the wall he is making a bad turn. A turn of this type will place the swimmer too far from the wall to be of any benefit to the swimmer. On turns, the one rule to follow is that as soon as the body is spun into the push-off position the swimmer must never waste any time getting into his swimming. The distance and speed of a push-off are governed by the position of the feet on the wall and manner of muscle movement. Many swimmers' push-offs are weak because they place their feet too high on the wall in relation to the body position. The feet should be about one foot directly below the hip line. The leg drive starts its motion from the extensors of the lower leg and is followed through by the extensors of the thigh. The heels of the feet should never touch the wall on the leg drive. The leg kick from the wall is first short and hard and then increases in depth as the swimmer approaches the surface. The swimmer's ability to come out of a turn at full speed will enable him to defeat many rivals.

## Sanitation in Basketball

(Continued from page 12)

germs from the floor, during time-outs, the players should be encouraged to stand rather than expose their bodies and uniforms to the dust and dirt common to many playing floors. The quantity of dust can be materially reduced if the floors are mopped with a damp antiseptic cloth preceding practices and games and during the intermission period of all regular games.

Basketballs are also a source of contamination. Washing of the balls and polishing them once a week do much to reduce germ growth.

After all, the health and well-being of the players should be the principal motive underlying all athletic contests. Any efforts along this line may be considered energy well expended in the right direction.

## Defensive Maneuvers

(Continued from page 9)

19. When a guard extends the wrong arm and foot, he is in no position to recover in time to stop the other opponent in the event he should receive a pass.

Then, too, the guard should not attempt to intercept any pass unless he is positive that he can get the ball. Failure to intercept in this situation means an easy basket. Attempts should not be made to block shots other than those under the basket, and even here, the guard should not leap into the air until the ball has left the opponent's hands.

for FEBRUARY, 1939

# RIDDELL

The Trade Mark of

## QUALITY SERVICE



**Style S**—Our finest model University shoe. A light, but very durable, glove-fitting yellowback Kangaroo sprint shoe. Hand-turned construction. **Price, \$6.00.**



**Style N**—A hand-turned shoe made of very fine grade of Athletic Tan leather. Fits like a glove. **Price, \$4.75.**



**Style T**—A good durable track shoe. Upper made of tough Athletic Tan leather that insures fit, comfort and resists perspiration. **Price, \$3.50.**



**Style 75**—A very strong shoe of welt construction. Highest grade oak soles. Made of Athletic Tan leather. Two spikes in heel. **Price, \$5.00.**

**Style J**—Field or jumping shoe of a grade corresponding to Style S. Has counter and two spikes in heel. Our very best yellowback field shoe. **Price, \$6.50.**



**Style NB**—A very fine Goodyear welt construction baseball shoe with split shank sole. Made of Ath-Tan Kangaroo. Used by many professionals. **Price, \$5.00.**



**Style KB**—Goodyear welt construction with straight sole. An extremely strong shoe. Upper made of the finest Athletic Tan leather. Used by quite a few Big League catchers and pitchers. Best shoe in our line for this purpose. **Price, \$3.75.**



**Style 41**—The finest value in a baseball shoe. Made of a tough grade of Athletic Tan leather. Split shank sole. **Price, \$3.50.**



**Style 39**—A very good shoe for the money. Upper made of a tough grade of Athletic Tan leather. Counter and insole made of best shoe fiber. Outsole of good Oak leather. A value hard to beat. **Price, \$2.75.**

**Riddell Track Shoes** feature an interchangeable spike in three lengths:—  
1/4" for board tracks  
3/8" for indoor dirt tracks  
5/8" for outdoor tracks.

The soles of the shoes are reinforced with a steel plate. The fixture binds the sole together in such a way that the spikes cannot punch up into the foot.

1259-63  
N. WOOD STREET

JOHN T. RIDDELL, Inc. CHICAGO ILLINOIS

# BASKETBALL GAMES ARE WON BEFORE THE SEASON BEGINS

*It's the pre-season study that insures the season's success*



Ward L. Lambert

Study **Practical Basketball**. Ward L. "Piggie" Lambert's book on basketball fundamentals and strategy. It gives in clear and concise style the methods that have brought success for years to Purdue University teams. If you haven't ordered a copy for yourself or your library, do so now.



**This →  
is what  
the book  
contains**

- Chapter I—Handling the Ball—General Essentials—Types of Passes.
- Chapter II—Offensive Floor Work.
- Chapter III—Basket Shooting—Its Importance—Habits—Types of Shots—Changing Style—Free Throwing.
- Chapter IV—The Dribble—Its Origin and Use—Technique of the Dribble.
- Chapter V—Individual Defense—General (Balance, Stances, Footwork, Mental Alertness)—Guarding a Man with the Ball—Guarding a Man Without the Ball.
- Chapter VI—Team Defense—General Considerations—Man-to-Man Defense—Zone Defense—Checking Five-Man Defense—Fast-Break Defense—Special Defenses—Strategy of Defense.
- Chapter VII—Team Offense—Historical Development—General Essentials—Coaching Advice—Fast-Break (Long Pass, Short Pass Crossing)—Set Formation—Slow-Break (Pass to Forward, Pass to Center, Spread Formation)—Special Offense Against Zone—Various Systems of Offense (Crisscross System, Screening System by Pivots, Three-Man Lane, Side Line Screening System, Long Shot, Continuous Triangle)—Strategy of Offense.
- \* Chapter VIII—Center Tip Play—Even Control—Control by Opponents—Own Control Absolute.
- Chapter IX—Plays—Out-of-Bounds—Free Throw—Jump Ball.
- Chapter X—Training, Conditioning and Practice.
- Chapter XI—The Coach, a Student of Psychology.
- Chapter XII—Tournaments.

## ORDER NOW!

**Practical Basketball** . . . 67 photographs of players in action . . . 114 diagrams of drills and plays . . . 243 pages

### New Price

\$2.00 (plus postage) is the price at which the remainder of the books will be sold. Rush your order before the supply is exhausted.

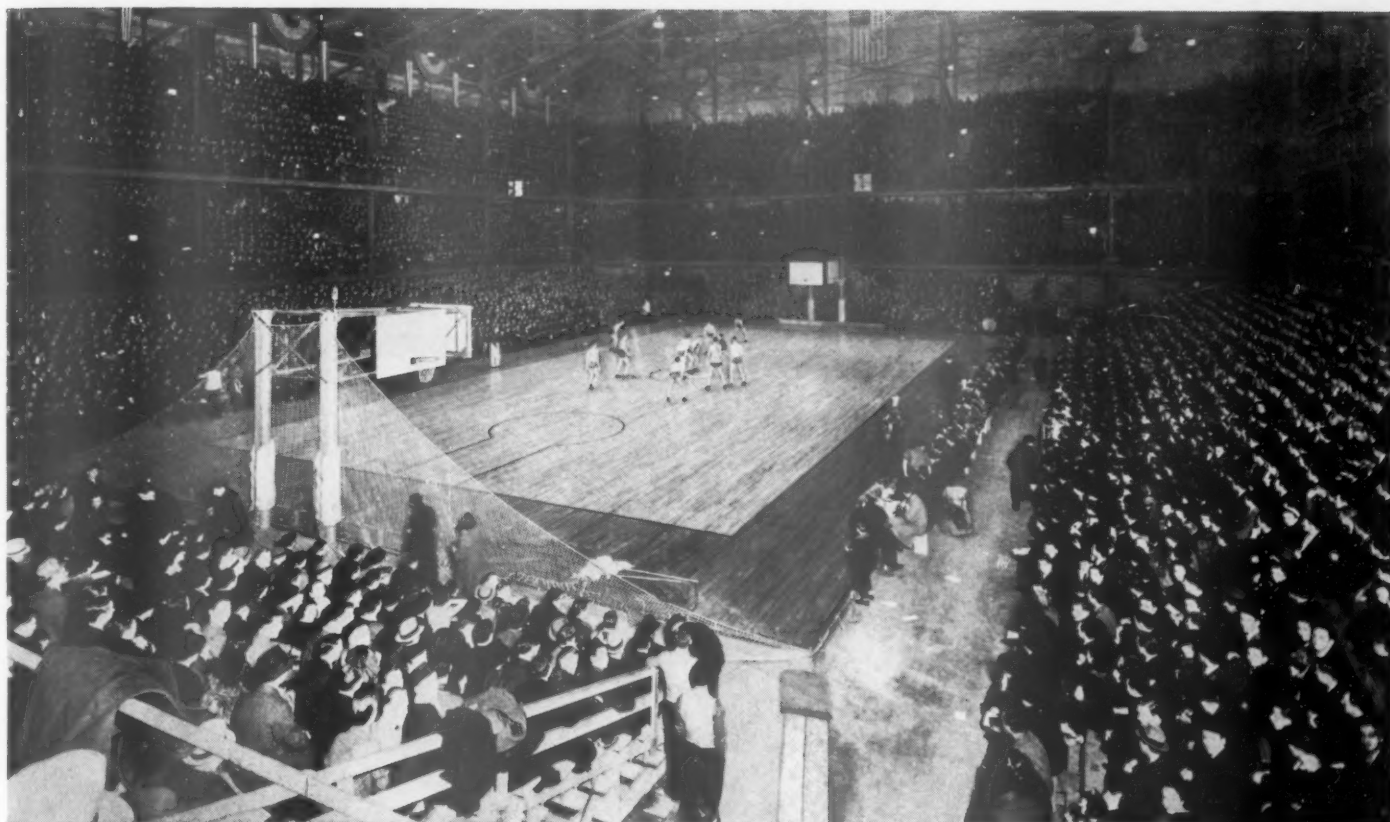
\* Loose leaf chapter on Play Without the Center Tip, written by Mr. Lambert, sent with the book.

**The Athletic Journal Publishing Co.**  
6858 Glenwood Avenue Chicago, Illinois

## INDEX TO ADVERTISERS

	Page
Absorbine Jr . . . . .	30
American Hair & Felt Co. . . . .	38
Basketball Educational Bureau . . . . .	22-23
Bike Web Mfg. Co. . . . .	1
DeGroat, H. S. . . . .	40
Denver Chemical Mfg. Co., The . . . . .	37
Dolge Co., The C. B. . . . .	32
Floorcraft Laboratories . . . . .	Inside Back Cover
General Mills, Inc. . . . .	25
Greco Fencing Equipment Co. . . . .	42
Hillerich & Bradshy Co. . . . .	36
Huntington Laboratories, Inc. . . . .	Inside Front Cover
Ivory System . . . . .	Back Cover
McGraw-Hill Book Co., Inc. . . . .	42
Medart Mfg. Co. . . . .	34, 38
National Sports Equipment Co. . . . .	34
O'Shea Knitting Mills . . . . .	39
Petersen & Co. . . . .	42
Reach, Wright & Ditson, A. J. . . . .	35
Riddell, Inc., John T. . . . .	43
Sand Knitting Mills Co. . . . .	42
Sherman Hotel . . . . .	27
Spalding & Bros., A. G. . . . .	31
Tetra Bandage Co. . . . .	37
Toro Mfg. Co. . . . .	29
Vassar Company . . . . .	41
Vince Fencing Equipment . . . . .	37
Wilson Sporting Goods Co. . . . .	3
Witchell-Sheill Co. . . . .	4
Worthington Mower Co. . . . .	33





The Wisconsin-Purdue game at Madison, 1938.

## QUALITY TEAMS need quality Floors



PROTECTO GYM SEAL is a highly penetrating gymnasium finish with no-slip, no-burn features. Boundary lines and out-of-bound markings are available in all colors,

PROTECTO HEAVY TRAFFIC SEAL was developed to withstand the punishment to which classroom and hall floors are subjected daily. It comes in high or dull gloss finish.

### NO FUTURE SANDINGS ARE NECESSARY

when Protecto Seals are used. The wood is always protected. No dirt can become embedded in its surface.

Write for full particulars and prices. A quart trial-size can of PROTECTO SEAL will be sent for 50 cents to cover postage and packing. Specify the seal desired. Try it on your center jump circle or a classroom floor and test results.

**FLOORCRAFT**  
*Laboratories*

M. V. HANLEY, Pres.  
1328 Sherman Ave., Evanston, Ill.



# LEADERSHIP

*in ATHLETIC RECONDITIONING*

When you place your Athletic Equipment in the care of the IVORY SYSTEM to have it cleaned and reconditioned—you have intrusted it to good hands—competent hands—hands which for twenty years have been cleaning and repairing Athletic Equipment—to the exclusion of everything else.

During all of these years no civilian clothes or shoes have ever been serviced in our shops. We have been too busy attending to this exacting business of salvaging Athletic Equipment—to be bothered with Fur Coats, Men's Suits or Wet Wash Laundry.

Our imitators have been numerous and noisy—few have had the foresight or persistency to stick to trying to do one thing well—as we have. Possibly that is why the IVORY SYSTEM is—and always has been "Well Ahead of the Field."



**THE OLDEST—LARGEST AND FORE-  
MOST BUSINESS OF ITS KIND IN THE  
WORLD "TRULY IN A CLASS BY ITSELF."**



RECONDITIONERS OF ATHLETIC EQUIPMENT  
SALEM - Massachusetts - PEABODY

I  
V  
O  
R  
Y  
S  
Y  
S  
T  
E  
M